

Thu Oct '9 15:36:15 2003 [BLASTN 2.2.6 [Apr-09-2003], NCBI]

/home/glinda/vf/Legal/byeung/ss.DNA33461 (1616 bp)

/home/glinda/vf/Legal/byeung/ss.DNA33461

Database: gen (32,610,065 seqs, 38,226,532,198 bp) Oct 5, 2003 5:36 PM

Locus list: hum (8,873,632 seqs, 11,292,893,600 bp)

Matrix: blastn matrix:1 -3, T: 0, A: 0, X1: 6, X2: 15, S1: 12, S2: 20, eval: 10.

Gap Penalties: Existence: 5, Extension: 2

Sequences producing High-scoring Segment Pairs:					Frame	Score	Match	Pct	E-val
1	P_ACD23222	Human PRO polynucleotide #20.			+	1613	1616	100	0.0
2	P_ABX71541	Human cDNA encoding secreted/transmembra			+	1613	1616	100	0.0
3	P_ACD20098	Human secreted / transmembrane polypepti			+	1613	1616	100	0.0
4	P_AAF72392	Human PRO317 cDNA.			+	1613	1616	100	0.0
5	P_AAF60376	PRO317 coding sequence.			+	1613	1616	100	0.0
6	P_AAA30056	Human PRO317 nucleotide sequence.			+	1613	1616	100	0.0
7	P_AAX28437	EGF-like homologue EBAF-2 coding sequenc			+	1613	1616	100	0.0
8	P_AAX52234	Protein PRO317 cDNA clone DNA33461-1199.			+	1613	1616	100	0.0
9	P_ACA58386	cDNA encoding human PRO polypeptide #20.			+	1613	1616	100	0.0
10	P_ACA60093	Human cDNA for secreted/transmembrane pr			+	1613	1616	100	0.0
11	P_ACA05431	cDNA encoding human secreted protein PRO			+	1613	1616	100	0.0
12	P_ABX96110	Human secreted/transmembrane protein cDN			+	1613	1616	100	0.0
13	P_ACA58989	Human PRO polynucleotide #20.			+	1613	1616	100	0.0
14	P_ACD19736	Human secreted / transmembrane polypepti			+	1613	1616	100	0.0
15	P_ACA54901	Novel human secreted and transmembrane p			+	1613	1616	100	0.0
16	P_ACD07493	Novel human secreted and transmembrane p			+	1613	1616	100	0.0
17	P_ACD23584	Human PRO polynucleotide #20.			+	1613	1616	100	0.0
18	AY358873	Homo sapiens clone DNA33461 LEFTB (UNQ27			+	1613	1616	100	0.0
19	AX076929	Sequence 41 from Patent WO0105836. DNA,			+	1613	1616	100	0.0
20	AX697522	Sequence 113 from Patent WO0104311. DNA			+	1613	1616	100	0.0
21	BD075461	Secretory and transmembrane polypeptide			+	1613	1616	100	0.0
22	BD172321	Secreted and transmembrane polypeptides			+	1613	1616	100	0.0
23	BD172640	Secreted and transmembrane polypeptides			+	1613	1616	100	0.0
24	BD172959	Secreted and transmembrane polypeptides			+	1613	1616	100	0.0
25	BD173278	Secreted and transmembrane polypeptides			+	1613	1616	100	0.0
26	BD175312	Secretory and transmembrane polypeptide			+	1613	1616	100	0.0
27	NM_020997	Homo sapiens left-right determination, f			+	1613	1615	100	0.0
28	BC027883	Homo sapiens, left-right determination,			+	1609	1614	100	0.0
29	P_AAD45128	Human Lefty cDNA.			+	1590	1599	100	0.0
30	P_AAX31925	Human lefty protein encoding DNA.			+	1590	1599	100	0.0
31	P_ABQ55009	Human ovarian antigen HUKJ46 cDNA, SEQ			+	1587	1606	99	0.0

>1 P_ACD23222 Human PRO polynucleotide #20. (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461      1 TGAGACCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
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P_ACD23222      1 TGAGACCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461     61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
P_ACD23222     61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461    121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
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P_ACD23222    121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
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ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
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P_ACD23222 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
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P_ACD23222 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
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P_ACD23222 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
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P_ACD23222 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
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ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_ACD23222 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>2 P_ABX71541 Human cDNA encoding secreted/transmembrane protein PRO317. (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_ABX71541 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_ABX71541 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ABX71541 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCACCCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

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ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

 P_ACD23222 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

 ss.DNA33461 241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

 P_ACD23222 241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

 ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCCCTGGCGTTGGAGGCCAGCACACACCT

 P_ACD23222 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCCCTGGCGTTGGAGGCCAGCACACACCT

 ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

 P_ACD23222 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

 ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 P_ACD23222 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 P_ACD23222 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 P_ACD23222 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 P_ACD23222 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAACAAGCT

 P_ACD23222 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAACAAGCT

 ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 P_ACD23222 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 P_ACD23222 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 P_ACD23222 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG

 P_ACD23222 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG

 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 P_ACD23222 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

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P_ABX71541 181 AGAGGTGCCACCCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
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P_ABX71541 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
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P_ABX71541 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
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ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGTGCT
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P_ABX71541 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGTGCT
ss.DNA33461 661 GCTACAGGTGTTCGGTGCAGAGGGAGCATCTGGGCCCCGTGGCGTCCGGCGCCCCACAAGCT
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P_ABX71541 661 GCTACAGGTGTTCGGTGCAGAGGGAGCATCTGGGCCCCGTGGCGTCCGGCGCCCCACAAGCT
ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
*****
P_ABX71541 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
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ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
*****
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ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG
*****
P_ABX71541 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG
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P_ABX71541 961 GCAGCCCCCGGAGGCCCTGGCCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
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P_ABX71541 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

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P_ABX71541 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

P_ABX71541 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

P_ABX71541 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

P_ABX71541 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

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ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

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ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTCTGCTCACTGGATCTGGGCT

P_ABX71541 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTCTGCTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

P_ABX71541 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

P_ABX71541 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

>3 P_ACD20098 Human secreted / transmembrane polypeptide PRO317 cDNA. (1616 bp)
[1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/+

ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

P_ACD20098 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC

P_ACD20098 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

P_ACD20098 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

P_ACD20098 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

P_ACD20098 241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCCCTGGCGTTGGAGGCCAGCACACACCT

P_ACD20098 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCCCTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

P_ACD20098 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

P_ACD20098 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

P_ACD20098 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

P_ACD20098 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

P_ACD20098 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

P_ACD20098 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

P_ACD20098 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCATGAC

P_ACD20098 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCATGAC

ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

P_ACD20098 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

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P_ACD20098 901 CGAGAACTGGGTGCTGGAGCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG

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P_ACD20098 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

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P_ACD20098 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

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ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
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P_ACD20098 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
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P_ACD20098 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_ACD20098 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
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P_ACD20098 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
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ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
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ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTCTGTCAGTCTGGGCT
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P_ACD20098 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTCTGTCAGTCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
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P_ACD20098 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA
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P_ACD20098 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

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>4 P_AAF72392 Human PRO317 cDNA. (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_AAF72392 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_AAF72392 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_AAF72392 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_AAF72392 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

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ss.DNA33461 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

 P_AAF72392 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

 ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

 P_AAF72392 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

 ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

 P_AAF72392 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

 ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 P_AAF72392 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 P_AAF72392 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 P_AAF72392 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGTGCT

 P_AAF72392 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGTGCT

 ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCACAAGCT

 P_AAF72392 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCACAAGCT

 ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 P_AAF72392 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 P_AAF72392 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 P_AAF72392 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG

 P_AAF72392 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG

 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 P_AAF72392 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 P_AAF72392 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

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P_AAF72392 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
*****
P_AAF72392 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_AAF72392 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCTCTGACAAGTTACCTC
*****
P_AAF72392 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCTCTGACAAGTTACCTC
ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
P_AAF72392 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_AAF72392 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
*****
P_AAF72392 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
P_AAF72392 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_AAF72392 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>5 P_AAF60376 PRO317 coding sequence. (1616 bp) [1 seg]
 Score = 1613 (3198 bits), Expect = 0.0
 Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
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P_AAF60376 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_AAF60376 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_AAF60376 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_AAF60376 181 AGAGGTGCCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****

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P_AAF60376 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

P_AAF60376 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

P_AAF60376 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

P_AAF60376 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

P_AAF60376 481 GCGCAGCGCCCGGGCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

P_AAF60376 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

P_AAF60376 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCT

P_AAF60376 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCT
ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

P_AAF60376 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

P_AAF60376 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

P_AAF60376 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG

P_AAF60376 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

P_AAF60376 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

P_AAF60376 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

P_AAF60376 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

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ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
*****
P_AAF60376 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_AAF60376 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
P_AAF60376 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
P_AAF60376 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_AAF60376 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
*****
P_AAF60376 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
P_AAF60376 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_AAF60376 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

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>6 P_AAA30056 Human PRO317 nucleotide sequence. (1616 bp) [1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_AAA30056 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_AAA30056 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_AAA30056 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_AAA30056 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
P_AAA30056 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

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ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTGGCGTTGGAGGCCAGCACACACCT

 P_AAA30056 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTGGCGTTGGAGGCCAGCACACACCT

 ss.DNA33461 361 GCTGGTGTTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

 P_AAA30056 361 GCTGGTGTTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

 ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 P_AAA30056 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 P_AAA30056 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 P_AAA30056 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 P_AAA30056 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCACAAGCT

 P_AAA30056 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCACAAGCT

 ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 P_AAA30056 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 P_AAA30056 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 P_AAA30056 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 P_AAA30056 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 P_AAA30056 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 P_AAA30056 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 P_AAA30056 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

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P_AAA30056 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_AAA30056 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
P_AAA30056 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
P_AAA30056 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_AAA30056 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
*****
P_AAA30056 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
P_AAA30056 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_AAA30056 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>7 P_AAX28437 EGF-like homologue EBAF-2 coding sequence. DNA, PAT 22-JUN-1999 (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/+

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_AAX28437 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_AAX28437 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_AAX28437 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_AAX28437 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
P_AAX28437 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACCT

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*****
P_AAX28437 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
P_AAX28437 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
P_AAX28437 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
P_AAX28437 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
P_AAX28437 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGTGCT
*****
P_AAX28437 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGTGCT
ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGTGGCGTCCGGCGCCCCACAAGCT
*****
P_AAX28437 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGTGGCGTCCGGCGCCCCACAAGCT
ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
*****
P_AAX28437 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
*****
P_AAX28437 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
*****
P_AAX28437 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG
*****
P_AAX28437 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
*****
P_AAX28437 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
*****
P_AAX28437 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
*****
P_AAX28437 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
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P_AAX28437 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_AAX28437 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
P_AAX28437 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
P_AAX28437 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_AAX28437 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
*****
P_AAX28437 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
P_AAX28437 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_AAX28437 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

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>8 P_AAX52234 Protein PRO317 cDNA clone DNA33461-1199. DNA, PAT 25-JUN-1999
(1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_AAX52234 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_AAX52234 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_AAX52234 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_AAX52234 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
ss.DNA33461 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGAAAGAGGTT
*****
P_AAX52234 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACCT
*****

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P_AAX52234 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCCCTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

P_AAX52234 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

P_AAX52234 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

P_AAX52234 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

P_AAX52234 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

P_AAX52234 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCGCTGGCGTCCGGCGCCCAAGCT

P_AAX52234 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCGCTGGCGTCCGGCGCCCAAGCT
ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

P_AAX52234 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

P_AAX52234 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

P_AAX52234 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

P_AAX52234 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

P_AAX52234 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

P_AAX52234 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

P_AAX52234 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

P_AAX52234 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

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ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_AAX52234 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
P_AAX52234 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
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P_AAX52234 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCCTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_AAX52234 1381 TTCTCTATTCTTATTATTCACTGCCTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
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P_AAX52234 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
P_AAX52234 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_AAX52234 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>9 P_ACA58386 cDNA encoding human PRO polypeptide #20. cDNA, PAT 10-JUN-2003 (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_ACA58386 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
P_ACA58386 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ACA58386 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_ACA58386 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
P_ACA58386 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT
*****
P_ACA58386 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT

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ss.DNA33461	361	GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
P_ACA58386	361	GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461	421	GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
P_ACA58386	421	GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
ss.DNA33461	481	GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
P_ACA58386	481	GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461	541	CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
P_ACA58386	541	CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
ss.DNA33461	601	CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
P_ACA58386	601	CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461	661	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT
P_ACA58386	661	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT
ss.DNA33461	721	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
P_ACA58386	721	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
P_ACA58386	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
P_ACA58386	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461	901	CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
P_ACA58386	901	CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461	961	GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
P_ACA58386	961	GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
P_ACA58386	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461	1081	CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
P_ACA58386	1081	CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
P_ACA58386	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

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ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_ACA58386 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
P_ACA58386 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
P_ACA58386 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_ACA58386 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
*****
P_ACA58386 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
P_ACA58386 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_ACA58386 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>10 P_ACA60093 Human cDNA for secreted/transmembrane protein PR0317. (1616 bp)
[1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_ACA60093 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
P_ACA60093 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ACA60093 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_ACA60093 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
P_ACA60093 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT
*****
P_ACA60093 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT

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ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

P_ACA60093 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

P_ACA60093 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

P_ACA60093 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

P_ACA60093 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

P_ACA60093 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCGCTGGCGTCCGGCGCCACAAGCT

P_ACA60093 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCGCTGGCGTCCGGCGCCACAAGCT

ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

P_ACA60093 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

P_ACA60093 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

P_ACA60093 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

P_ACA60093 901 CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

P_ACA60093 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

P_ACA60093 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

P_ACA60093 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

P_ACA60093 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

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P_ACA60093 1201 GTGTGTGTTTCTGAAGTGTTGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
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P_ACA60093 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461 1321 ACCTAATTTTGTCTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
P_ACA60093 1321 ACCTAATTTTGTCTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_ACA60093 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
*****
P_ACA60093 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
P_ACA60093 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_ACA60093 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

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>11 P_ACA05431 cDNA encoding human secreted protein PRO317. (1616 bp) [1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_ACA05431 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
P_ACA05431 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ACA05431 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
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ss.DNA33461 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
P_ACA05431 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT
*****
P_ACA05431 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****

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P_ACA05431 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
 ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 P_ACA05431 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
 ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 P_ACA05431 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
 ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 P_ACA05431 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
 ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 P_ACA05431 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
 ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

 P_ACA05431 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT
 ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 P_ACA05431 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 P_ACA05431 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 P_ACA05431 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTCTGGCTTATGAGTGTGTGGGCACCTGCCG

 P_ACA05431 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCTCTGGCTTATGAGTGTGTGGGCACCTGCCG
 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 P_ACA05431 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 P_ACA05431 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
 ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 P_ACA05431 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
 ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 P_ACA05431 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
 ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 P_ACA05431 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

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ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
P_ACA05431 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
P_ACA05431 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACCTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_ACA05431 1381 TTCTCTATTCTTATTATTCACTGCACCTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCCANCTGTGTCATTGTTTACTTGTCCGTGCTCACTGGATCTGGGCT
*****
P_ACA05431 1441 ACCTGAGGGCAGAAAGCCCANCTGTGTCATTGTTTACTTGTCCGTGCTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACCTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGTCATCCC
*****
P_ACA05431 1501 AAAGTCCTCCACCACCACCTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGTCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_ACA05431 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>12 P_ABX96110 Human secreted/transmembrane protein cDNA, #22. (1616 bp) [1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_ABX96110 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC
*****
P_ABX96110 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ABX96110 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_ABX96110 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
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P_ABX96110 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
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P_ABX96110 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
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P_ABX96110 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

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ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 P_ABX96110 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 P_ABX96110 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 P_ABX96110 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 P_ABX96110 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT

 P_ABX96110 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT

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 P_ABX96110 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 P_ABX96110 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 P_ABX96110 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

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 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 P_ABX96110 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

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 ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 P_ABX96110 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 P_ABX96110 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 P_ABX96110 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

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P_ABX96110 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
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P_ABX96110 1321 ACCTAATTTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_ABX96110 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCAATTGTTTACTTGTCTGTCACTGGATCTGGGCT
*****
P_ABX96110 1441 ACCTGAGGGCAGAAAGCCANTGTGTCAATTGTTTACTTGTCTGTCACTGGATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
P_ABX96110 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
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P_ABX96110 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>13 P_ACA58989 Human PRO polynucleotide #20. (1616 bp) [1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
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P_ACA58989 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC
*****
P_ACA58989 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ACA58989 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
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ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
P_ACA58989 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT
*****
P_ACA58989 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
P_ACA58989 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
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P_ACA58989 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

P_ACA58989 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

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P_ACA58989 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCAAGCT

P_ACA58989 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCAAGCT
ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

P_ACA58989 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

P_ACA58989 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

P_ACA58989 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

P_ACA58989 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
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P_ACA58989 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

P_ACA58989 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
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P_ACA58989 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
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P_ACA58989 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

P_ACA58989 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

P_ACA58989 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

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ss.DNA33461 1321 ACCTAATTTTGGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
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P_ACA58989 1321 ACCTAATTTTGGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
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P_ACA58989 1381 TTCTCTATTCTTATTATTACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
*****
P_ACA58989 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
P_ACA58989 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_ACA58989 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>14 P_ACD19736 Human secreted / transmembrane polypeptide PRO317 cDNA. (1616 bp)
[1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
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P_ACD19736 1 TGAGACCCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_ACD19736 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ACD19736 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_ACD19736 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
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P_ACD19736 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT
*****
P_ACD19736 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
P_ACD19736 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
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P_ACD19736 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

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ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 P_ACD19736 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 P_ACD19736 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 P_ACD19736 601 CGACGTGACCGAGGCCGTGAACCTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCACAAGCT

 P_ACD19736 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCACAAGCT

 ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 P_ACD19736 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 P_ACD19736 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 ss.DNA33461 841 CGAGGGCACC CGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 P_ACD19736 841 CGAGGGCACC CGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 P_ACD19736 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 P_ACD19736 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 P_ACD19736 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

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 P_ACD19736 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 P_ACD19736 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

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 P_ACD19736 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 P_ACA54901 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

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 P_ACA54901 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

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 P_ACA54901 601 CGACGTGACCGAGGCCGTGAAC'TTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT

 P_ACA54901 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT

 ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 P_ACA54901 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 P_ACA54901 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 P_ACA54901 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

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 P_ACA54901 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 P_ACA54901 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

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 P_ACA54901 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

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 P_ACA54901 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

 P_ACA54901 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

 ss.DNA33461 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

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P_ACA54901 1321 ACCTAATTTTGTCTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
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*****
P_ACA54901 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTCTGTCCTGTCATCTGGGCT
*****
P_ACA54901 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTCTGTCATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
P_ACA54901 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_ACA54901 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

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>16 P_ACD07493 Novel human secreted and transmembrane protein PRO317 cDNA. (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
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P_ACD07493 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
P_ACD07493 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ACD07493 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
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ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
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P_ACD07493 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT
*****
P_ACD07493 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
P_ACD07493 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
P_ACD07493 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
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P_ACD07493 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
P_ACD07493 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
*****
P_ACD07493 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461 661 GCTACAGGTGTCGGTGACAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCACAAGCT
*****
P_ACD07493 661 GCTACAGGTGTCGGTGACAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCACAAGCT
ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
*****
P_ACD07493 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
*****
P_ACD07493 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
*****
P_ACD07493 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
*****
P_ACD07493 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
*****
P_ACD07493 961 GCAGCCCCCGGAGGCCCTGGCCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
*****
P_ACD07493 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
*****
P_ACD07493 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
*****
P_ACD07493 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
P_ACD07493 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
P_ACD07493 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****

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P_ACD07493 1321 ACCTAATTTTGGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

P_ACD07493 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

P_ACD07493 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

P_ACD07493 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

P_ACD07493 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

>17 P_ACD23584 Human PRO polynucleotide #20. (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

P_ACD23584 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC

P_ACD23584 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

P_ACD23584 121 CGGGGCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

P_ACD23584 181 AGAGGTGCCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

P_ACD23584 241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

P_ACD23584 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

P_ACD23584 361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

P_ACD23584 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

P_ACD23584 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461	541	CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

P_ACD23584	541	CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
ss.DNA33461	601	CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

P_ACD23584	601	CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461	661	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

P_ACD23584	661	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT
ss.DNA33461	721	GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

P_ACD23584	721	GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

P_ACD23584	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

P_ACD23584	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461	901	CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

P_ACD23584	901	CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461	961	GCAGCCCCCGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

P_ACD23584	961	GCAGCCCCCGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

P_ACD23584	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461	1081	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

P_ACD23584	1081	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

P_ACD23584	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461	1201	GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

P_ACD23584	1201	GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461	1261	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

P_ACD23584	1261	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461	1321	ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

P_ACD23584	1321	ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

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ss.DNA33461 1381 TTCTCTATTCTTATTATTCACCTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
P_ACD23584 1381 TTCTCTATTCTTATTATTCACCTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
*****
P_ACD23584 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
P_ACD23584 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
P_ACD23584 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>18 AY358873 Homo sapiens clone DNA33461 LEFTB (UNQ278) mRNA, complete cds.
(1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461      1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
AY358873         1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461     61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC
*****
AY358873        61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC

ss.DNA33461     121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
AY358873        121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461     181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
AY358873        181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461     241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
AY358873        241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461     301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
*****
AY358873        301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461     361 GCTGGTGTTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
AY358873        361 GCTGGTGTTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461     421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
AY358873        421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461     481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
AY358873        481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

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ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 AY358873 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461 601 CGACGTGACCGAGGCCGTGAAC TTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 AY358873 601 CGACGTGACCGAGGCCGTGAAC TTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGTGGCGTCCGGCGCCACAAGCT

 AY358873 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGTGGCGTCCGGCGCCACAAGCT

ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 AY358873 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

ss.DNA33461 781 CACCCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 AY358873 781 CACCCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 AY358873 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 AY358873 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 AY358873 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGT CAGCATCAAGGAGGGAGGCAGGACCAGGCC

 AY358873 1021 CTCGGAGACTGACTCGCTGCCCATGATCGT CAGCATCAAGGAGGGAGGCAGGACCAGGCC

ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 AY358873 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 AY358873 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 AY358873 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

 AY358873 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

 AY358873 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

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*****
AY358873 1381 TTCTCTATTCTTATTATTCACCTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCCANCTGTGTCATTGTTTACTTGTCTCTGTCACCTGGATCTGGGCT
*****
AY358873 1441 ACCTGAGGGCAGAAAGCCCANCTGTGTCATTGTTTACTTGTCTCTGTCACCTGGATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACCTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGTCATCCC
*****
AY358873 1501 AAAGTCCTCCACCACCACCTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGTCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
AY358873 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>19 AX076929 Sequence 41 from Patent WO0105836. DNA, linear, PAT 22-FEB-2001 (1616 bp) [1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461 1 TGAGACCCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
AX076929 1 TGAGACCCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
AX076929 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
AX076929 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
AX076929 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
AX076929 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
*****
AX076929 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
AX076929 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
AX076929 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
AX076929 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

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AX076929      541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
ss.DNA33461   601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
*****
AX076929      601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461   661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT
*****
AX076929      661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT
ss.DNA33461   721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
*****
AX076929      721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461   781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
*****
AX076929      781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461   841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
*****
AX076929      841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461   901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
*****
AX076929      901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461   961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
*****
AX076929      961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461  1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
*****
AX076929      1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461  1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
*****
AX076929      1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461  1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
*****
AX076929      1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461  1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
AX076929      1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461  1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
AX076929      1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461  1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
AX076929      1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461  1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****

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AX076929 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

AX076929 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

AX076929 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

AX076929 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

>20 AX697522 Sequence 113 from Patent WO0104311. DNA, linear, PAT.02-APR-2003
(1616 bp) [1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

AX697522 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC

AX697522 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

AX697522 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
ss.DNA33461 181 AGAGGTGCCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

AX697522 181 AGAGGTGCCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

AX697522 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGCGTTGGAGGCCAGCACACACCT

AX697522 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGCGTTGGAGGCCAGCACACACCT
ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

AX697522 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

AX697522 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

AX697522 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

AX697522 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

AX697522 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

AX697522 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

AX697522 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

AX697522 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

AX697522 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

AX697522 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

AX697522 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

AX697522 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

AX697522 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

AX697522 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

AX697522 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCTCTGACAAGTTACCTC

AX697522 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

AX697522 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

AX697522 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

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ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
*****
AX697522      1441 ACCTGAGGGCAGAAAGCCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
AX697522      1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
AX697522      1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

```

>21 BD075461 Secretary and transmembrane polypeptide and nucleic acid encoding (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

```

ss.DNA33461      1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
BD075461         1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461     61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
BD075461        61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461    121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
BD075461       121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461    181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
BD075461       181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461    241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
BD075461       241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461    301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
*****
BD075461       301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461    361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
BD075461       361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461    421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
BD075461       421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461    481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
BD075461       481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461    541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
BD075461       541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

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ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

BD075461 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCACAAGCT

BD075461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCACAAGCT

ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

BD075461 721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACC AATGAC

BD075461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACC AATGAC

ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

BD075461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

BD075461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

BD075461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

BD075461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAAGTGCAGCTGTGCCTCGGATGGTGC

BD075461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

BD075461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

BD075461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

BD075461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

BD075461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

BD075461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

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ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
*****
BD075461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
BD075461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
BD075461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

```

>22 BD172321 Secreted and transmembrane polypeptides and nucleic acids encoding (1616 bp) [1 seg]
 Score = 1613 (3198 bits), Expect = 0.0
 Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/+

```

ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
BD172321 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
BD172321 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
BD172321 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
BD172321 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
BD172321 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACT
*****
BD172321 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
BD172321 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
BD172321 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
BD172321 481 GCGCAGCGCCCCGGGCCCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
BD172321 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

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ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

BD172321 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCT

BD172321 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCT

ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

BD172321 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACC AATGAC

BD172321 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACC AATGAC

ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

BD172321 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

BD172321 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

BD172321 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGA'TCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

BD172321 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

BD172321 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGA CT

BD172321 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGA CT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

BD172321 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

BD172321 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

BD172321 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

BD172321 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCCAN TGTCATTGTTTACTTGTCTCTGCTCACTGGATCTGGGCT

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*****
BD172321      1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCTACTGGATCTGGGGT
ss.DNA33461  1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
BD172321      1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
ss.DNA33461  1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA
*****
BD172321      1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

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>23 BD172640 Secreted and transmembrane polypeptides and nucleic acids encoding (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/+

```

ss.DNA33461    1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
BD172640       1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461   61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
BD172640      61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461   121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
BD172640     121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461   181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
BD172640     181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461   241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
BD172640     241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461   301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT
*****
BD172640     301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461   361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
BD172640     361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461   421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
BD172640     421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461   481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
BD172640     481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461   541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
BD172640     541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461   601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

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*****
BD172640      601  CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461   661  GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCTGGCGTCCGGCGCCCACAAGCT
*****
BD172640      661  GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCTGGCGTCCGGCGCCCACAAGCT
ss.DNA33461   721  GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
*****
BD172640      721  GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461   781  CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
*****
BD172640      781  CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461   841  CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
*****
BD172640      841  CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461   901  CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
*****
BD172640      901  CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461   961  GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
*****
BD172640      961  GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461  1021  CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
*****
BD172640      1021  CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461  1081  CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
*****
BD172640      1081  CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461  1141  GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
*****
BD172640      1141  GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461  1201  GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
*****
BD172640      1201  GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461  1261  GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
*****
BD172640      1261  GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461  1321  ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
*****
BD172640      1321  ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461  1381  TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
*****
BD172640      1381  TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461  1441  ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCCTGTCACTGGATCTGGGCT
*****

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BD172640      1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
ss.DNA33461  1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
*****
BD172640      1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC
ss.DNA33461  1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA
*****
BD172640      1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

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>24 BD172959 Secreted and transmembrane polypeptides and nucleic acids encoding (1616 bp) [1 seg]

Score = 1613 (3198 bits), Expect = 0.0

Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/+

```

ss.DNA33461    1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
BD172959       1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461   61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC
*****
BD172959      61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCTGGCCAGCCC

ss.DNA33461   121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
BD172959     121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461   181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
BD172959     181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461   241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
BD172959     241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461   301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT
*****
BD172959     301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461   361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
BD172959     361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461   421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
BD172959     421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461   481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
BD172959     481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461   541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
BD172959     541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461   601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
*****

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BD172959	601	CGACGTGACCGAGGCCGTGAAC'TTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT
ss.DNA33461	661	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCACAAGCT *****
BD172959	661	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCACAAGCT
ss.DNA33461	721	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA *****
BD172959	721	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCATGAC *****
BD172959	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCATGAC
ss.DNA33461	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC *****
BD172959	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461	901	CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG *****
BD172959	901	CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461	961	GCAGCCCCCGGAGGCCCTGGCC'TTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC *****
BD172959	961	GCAGCCCCCGGAGGCCCTGGCC'TTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC *****
BD172959	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461	1081	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC *****
BD172959	1081	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT *****
BD172959	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461	1201	GTGTGTGTTTCTGAAGTGTT'CGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT *****
BD172959	1201	GTGTGTGTTTCTGAAGTGTT'CGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461	1261	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC *****
BD172959	1261	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461	1321	ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT *****
BD172959	1321	ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461	1381	TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA *****
BD172959	1381	TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461	1441	ACCTGAGGGCAGAAAGCCANTGTGTCAATTGTTTACTTGTCTGTCACTGGATCTGGGCT *****
BD172959	1441	ACCTGAGGGCAGAAAGCCANTGTGTCAATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

 BD172959 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

 BD172959 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

>25 BD173278 Secreted and transmembrane polypeptides and nucleic acids encoding
 (1616 bp) [1 seg]
 Score = 1613 (3198 bits), Expect = 0.0
 Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/+

ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

 BD173278 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

 BD173278 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

 BD173278 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

 BD173278 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

 BD173278 241 GGCCCACTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

 BD173278 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

 BD173278 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

 BD173278 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461 481 GCGCAGCGCCCGGGCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

 BD173278 481 GCGCAGCGCCCGGGCCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

 BD173278 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

 BD173278 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT

 BD173278 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT

 ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 BD173278 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

 ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 BD173278 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 BD173278 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 BD173278 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 BD173278 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 BD173278 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 BD173278 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 BD173278 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 BD173278 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

 BD173278 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

 ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

 BD173278 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

 ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

 BD173278 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

 ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCAATTGTTTACTTGTCCTGTCACTGGATCTGGGCT

 BD173278 1441 ACCTGAGGGCAGAAAGCCANTGTGTCAATTGTTTACTTGTCCTGTCACTGGATCTGGGCT

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ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC
*****
BD173278      1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA
*****
BD173278      1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

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>26 BD175312 Secretory and transmembrane polypeptide and nucleic acid encoding (1616 bp) [1 seg]
 Score = 1613 (3198 bits), Expect = 0.0
 Identities = 1616/1616 (100%), at 1,1-1616,1616, Strand +/-

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ss.DNA33461      1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
BD175312          1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461     61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC
*****
BD175312        61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461    121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
BD175312       121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461    181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
BD175312       181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461    241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
BD175312       241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461    301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT
*****
BD175312       301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461    361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
BD175312       361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461    421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
BD175312       421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461    481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
BD175312       481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461    541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
BD175312       541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461    601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGCTGCT
*****
BD175312       601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGCTGCT

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ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCTGGCGTCCGGCGCCCAAGCT

BD175312 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCTGGCGTCCGGCGCCCAAGCT

ss.DNA33461 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

BD175312 721 GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

BD175312 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

BD175312 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

BD175312 901 CGAGAACTGGGTGCTGGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

BD175312 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

BD175312 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

BD175312 1081 CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

BD175312 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

BD175312 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

BD175312 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

ss.DNA33461 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

BD175312 1321 ACCTAATTTTGTCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

BD175312 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

BD175312 1441 ACCTGAGGGCAGAAAGCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

BD175312 1501 AAAGTCCTCCACCACCACCTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGTCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

BD175312 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

>27 NM_020997 Homo sapiens left-right determination, factor B (LEFTB), mRNA.
OMIM:603037 (1647 bp) [1 seg]
Score = 1613 (3198 bits), Expect = 0.0
Identities = 1615/1616 (99%), at 1,4-1616,1619, Strand +/+

ss.DNA33461 1 TGAGACCCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

NM_020997 4 TGAGACCCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACCTCTGGGTGTTGCCCCCTGGCCAGCCC

NM_020997 64 CAGCACCATGCAGCCCCCTGTGGCTCTGCTGGGCACCTCTGGGTGTTGCCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

NM_020997 124 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

NM_020997 184 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

NM_020997 244 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT

NM_020997 304 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCCTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

NM_020997 364 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

NM_020997 424 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

NM_020997 484 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

NM_020997 544 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

NM_020997 604 CGACGTGACCGAGGCCGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTGCGTGCAGAGGGAGCATCTGGGCCCCGTGGCGTCCGGCGCCCAAGCT

NM_020997	664	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT
ss.DNA33461	721	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA

NM_020997	724	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461	781	CACCCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

NM_020997	784	CACCCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

NM_020997	844	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461	901	CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

NM_020997	904	CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461	961	GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

NM_020997	964	GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

NM_020997	1024	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461	1081	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

NM_020997	1084	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

NM_020997	1144	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461	1201	GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

NM_020997	1204	GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461	1261	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

NM_020997	1264	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461	1321	ACCTAATTTTGGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

NM_020997	1324	ACCTAATTTTGGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461	1381	TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

NM_020997	1384	TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461	1441	ACCTGAGGGCAGAAAGCCCAANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT

NM_020997	1444	ACCTGAGGGCAGAAAGCCCAATGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
ss.DNA33461	1501	AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

NM_020997 1504 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

NM_020997 1564 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

>28 BC027883 Homo sapiens, left-right determination, factor B, clone MGC:34249
(1644 bp) [1 seg]

Score = 1609 (3190 bits), Expect = 0.0

Identities = 1614/1616 (99%), at 1,1-1616,1616, Strand +/+

ss.DNA33461 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

BC027883 1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

BC027883 61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCC

ss.DNA33461 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

BC027883 121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

BC027883 181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

BC027883 241 GGCCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT

BC027883 301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTTCTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

BC027883 361 GCTGGTGTTCGGCATGGAGCAGCGGCTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

BC027883 421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

BC027883 481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA

ss.DNA33461 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

BC027883 541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

BC027883 601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCT

ss.DNA33461 661 GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

BC027883	661	GCTACAGGTGTCGGTGCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCACAAGCT
ss.DNA33461	721	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA *****
BC027883	721	GGTCCGCTTTGCCTCGCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
ss.DNA33461	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC *****
BC027883	781	CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC
ss.DNA33461	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC *****
BC027883	841	CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC
ss.DNA33461	901	CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG *****
BC027883	901	CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG
ss.DNA33461	961	GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC *****
BC027883	961	GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC
ss.DNA33461	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC *****
BC027883	1021	CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC
ss.DNA33461	1081	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC *****
BC027883	1081	CCAGGTGGTCAGCCTGCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC
ss.DNA33461	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT *****
BC027883	1141	GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT
ss.DNA33461	1201	GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT *****
BC027883	1201	GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT
ss.DNA33461	1261	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC *****
BC027883	1261	GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC
ss.DNA33461	1321	ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT *****
BC027883	1321	ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT
ss.DNA33461	1381	TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA *****
BC027883	1381	TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA
ss.DNA33461	1441	ACCTGAGGGCAGAAAGCCCAANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT ** *****
BC027883	1441	ACTTGAGGGCAGAAAGCCCAATGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCT
ss.DNA33461	1501	AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC *****
BC027883	1501	AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTTGTGCATCCC

ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

BC027883 1561 CAATCCAGATAATAAAGACTTTGTAAACATGAATAAAACACATTTTATTCTAAAA

>29 P_AAD45128 Human Lefty cDNA. (1688 bp) [1 seg]

Score = 1590 (3152 bits), Expect = 0.0

Identities = 1599/1601 (99%), Gaps = 1/1601 (0%), at 16,1-1616,1600, Strand +/+

ss.DNA33461 16 GCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGGCAGCACCATGCAGCC

P_AAD45128 1 GCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGGCAGCACCATGCAGCC

ss.DNA33461 76 CCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCCCGGGGCCGCCCTGAC

P_AAD45128 61 CCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCCCGGGGCCGCCCTGAC

ss.DNA33461 136 CGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAAAGAGGTGCCCCACCCT

P_AAD45128 121 CGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAAAGAGGTGCCCCACCCT

ss.DNA33461 196 GGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAGGGCCAGTACGTGGC

P_AAD45128 181 GGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAGGGCCAGTACGTGGC

ss.DNA33461 256 CCTGCTGCAGCGCAGCCACGGGGACCGTCCCGCGGAAAGAGGTTTCAGCCAGAGCTTCCG

P_AAD45128 241 CCTGCTGCAGCGCAGCCACGGGGACCGTCCCGCGGAAAGAGGTTTCAGCCAGAGCTTCCG

ss.DNA33461 316 AGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCTGCTGGTGTTCGGCAT

P_AAD45128 301 AGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCTGCTGGTGTTCGGCAT

ss.DNA33461 376 GGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCTGCGGCTCTTCCAGGA

P_AAD45128 361 GGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCTGCGGCTCTTCCAGGA

ss.DNA33461 436 GCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCCGCGCAGCGCCCCGGGC

P_AAD45128 421 GCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCCGCGCAGCGCCCCGGGC

ss.DNA33461 496 CCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAACCGCACCTCCCTCAT

P_AAD45128 481 CCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAACCGCACCTCCCTCAT

ss.DNA33461 556 CGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTTCGACGTGACCGAGGC

P_AAD45128 541 CGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTTCGACGTGACCGAGGC

ss.DNA33461 616 CGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCTGCTACAGGTGTCCGT

P_AAD45128 601 CGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCTGCTACAGGTGTCCGT

ss.DNA33461 676 GCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCTGGTCCGCTTTGCCTC

P_AAD45128 661 GCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCTGGTCCGCTTTGCCTC

ss.DNA33461 736 GCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCACACCCTGGACCTTGG

 P_AAD45128 721 GCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCACACCCTGGACCTTGG

 ss.DNA33461 796 GGA CTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGACCGAGGGCACCCGCTG

 P_AAD45128 781 GGA CTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGACCGAGGGCACCCGCTG

 ss.DNA33461 856 CTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGCCGAGA ACTGGGTGCT

 P_AAD45128 841 CTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGCCGAGA ACTGGGTGCT

 ss.DNA33461 916 GGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCGGCAGCCCCCGGAGGC

 P_AAD45128 901 GGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCGGCAGCCCCCGGAGGC

 ss.DNA33461 976 CCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGCCTCGGAGACTGACTC

 P_AAD45128 961 CCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGCCTCGGAGACTGACTC

 ss.DNA33461 1036 GCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCCCCAGGTGGTCAGCCT

 P_AAD45128 1021 GCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCCCCAGGTGGTCAGCCT

 ss.DNA33461 1096 GCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGGCTCGTGCCAAGGAG

 P_AAD45128 1081 GCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGGCTCGTGCCAAGGAG

 ss.DNA33461 1156 GCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTTGTGTGTGTTTCTGAA

 P_AAD45128 1141 GCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTTGTGTGTGTTTCTGAA

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 P_AAD45128 1201 GTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGATGGACAAATGCTCTGT

 ss.DNA33461 1276 GCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTCACCTAATTTTGTCTT

 P_AAD45128 1261 GCTCTCTA-TGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTCACCTAATTTTGTCTT

 ss.DNA33461 1336 CTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTTTTCTCTATTCTTATT

 P_AAD45128 1320 CTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTTTTCTCTATTCTTATT

 ss.DNA33461 1396 ATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTAACCTGAGGGCAGAAA

 P_AAD45128 1380 ATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTAACCTGAGGGCAGAAA

 ss.DNA33461 1456 GCCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCTAAAGTCTCCACCAC

 P_AAD45128 1440 GCCCAATGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCTAAAGTCTCCACCAC

 ss.DNA33461 1516 CACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGTCATCCCCAATCCAGATAATAA

 P_AAD45128 1500 CACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGTCATCCCCAATCCAGATAATAA

 ss.DNA33461 1576 AGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

P_AAD45128 1560 AGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

>30 P_AAX31925 Human lefty protein encoding DNA. (1688 bp) [1 seg]

Score = 1590 (3152 bits), Expect = 0.0

Identities = 1599/1601 (99%), Gaps = 1/1601 (0%), at 16,1-1616,1600, Strand +/+

ss.DNA33461 16 GCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGGCAGCACCATGCAGCC

P_AAX31925 1 GCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGGCAGCACCATGCAGCC

ss.DNA33461 76 CCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCCCGGGGCCGCCCTGAC

P_AAX31925 61 CCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCTGGCCAGCCCCGGGGCCGCCCTGAC

ss.DNA33461 136 CGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAAAGAGGTGCCCCACCCT

P_AAX31925 121 CGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAAAGAGGTGCCCCACCCT

ss.DNA33461 196 GGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAGGGCCAGTACGTGGC

P_AAX31925 181 GGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAGGGCCAGTACGTGGC

ss.DNA33461 256 CCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTTTCAGCCAGAGCTTCCG

P_AAX31925 241 CCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTTTCAGCCAGAGCTTCCG

ss.DNA33461 316 AGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCTGCTGGTGTTCGGCAT

P_AAX31925 301 AGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCTGCTGGTGTTCGGCAT

ss.DNA33461 376 GGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCTGCGGCTCTTCCAGGA

P_AAX31925 361 GGAGCAGCGGCTGCCGCCCAACAGCGAGCTGGTGCAGGCCGTGCTGCGGCTCTTCCAGGA

ss.DNA33461 436 GCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCCGCGCAGCGCCCCGGGC

P_AAX31925 421 GCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCCGCGCAGCGCCCCGGGC

ss.DNA33461 496 CCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAACCGCACCTCCCTCAT

P_AAX31925 481 CCGGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAACCGCACCTCCCTCAT

ss.DNA33461 556 CGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTTCGACGTGACCGAGGC

P_AAX31925 541 CGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTTCGACGTGACCGAGGC

ss.DNA33461 616 CGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCTGCTACAGGTGTGGT

P_AAX31925 601 CGTGAACTTCTGGCAGCAGCTGAGCCGGCCCCGGCAGCCGCTGCTGCTACAGGTGTGGT

ss.DNA33461 676 GCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCTGGTCCGCTTTGCCTC

P_AAX31925 661 GCAGAGGGAGCATCTGGGCCCCGCTGGCGTCCGGCGCCCCACAAGCTGGTCCGCTTTGCCTC

ss.DNA33461 736 GCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCACACCCTGGACCTTGG

P_AAX31925 721 GCAGGGGGCGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCACACCCTGGACCTTGG
 ss.DNA33461 796 GGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGACCGAGGGCACCCGCTG

 P_AAX31925 781 GGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGACCGAGGGCACCCGCTG
 ss.DNA33461 856 CTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGCCGAGAACTGGGTGCT

 P_AAX31925 841 CTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGCCGAGAACTGGGTGCT
 ss.DNA33461 916 GGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCGGCAGCCCCCGGAGGC

 P_AAX31925 901 GGAGCCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCGGCAGCCCCCGGAGGC
 ss.DNA33461 976 CCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGCCTCGGAGACTGACTC

 P_AAX31925 961 CCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGCCTCGGAGACTGACTC
 ss.DNA33461 1036 GCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCCCCAGGTGGTCAGCCT

 P_AAX31925 1021 GCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCCCCAGGTGGTCAGCCT
 ss.DNA33461 1096 GCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGCCTCGTGCCAAGGAG

 P_AAX31925 1081 GCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGCCTCGTGCCAAGGAG
 ss.DNA33461 1156 GCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTTGTGTGTGTTTCTGAA

 P_AAX31925 1141 GCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTTGTGTGTGTTTCTGAA
 ss.DNA33461 1216 GTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGATGGACAAATGCTCTGT

 P_AAX31925 1201 GTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGATGGACAAATGCTCTGT
 ss.DNA33461 1276 GCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTCACCTAATTTTGTCTT

 P_AAX31925 1261 GCTCTCTA-TGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTCACCTAATTTTGTCTT
 ss.DNA33461 1336 CTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTTTTCTCTATTCTTATT

 P_AAX31925 1320 CTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTTTTCTCTATTCTTATT
 ss.DNA33461 1396 ATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTAACCTGAGGGCAGAAA

 P_AAX31925 1380 ATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTAACCTGAGGGCAGAAA
 ss.DNA33461 1456 GCCCANTGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCTAAAGTCCTCCACCAC

 P_AAX31925 1440 GCCCAATGTGTCATTGTTTACTTGTCTGTCACTGGATCTGGGCTAAAGTCCTCCACCAC
 ss.DNA33461 1516 CACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCCCAATCCAGATAATAA

 P_AAX31925 1500 CACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCCCAATCCAGATAATAA
 ss.DNA33461 1576 AGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

 P_AAX31925 1560 AGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

>31 P_ABQ55009 Human ovarian antigen HUKAJ46 cDNA, SEQ ID NO:889. (1616 bp) [1 seg]

Score = 1587 (3146 bits), Expect = 0.0

Identities = 1606/1616. (99%), Gaps = 2/1616 (0%), at 1,3-1616,1616, Strand +/-

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ss.DNA33461      1 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG
*****
P_ABQ55009       3 TGAGACCCTCCTGCAGCCTTCTCAAGGGACAGCCCCACTCTGCCTCTTGCTCCTCCAGGG

ss.DNA33461     61 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC
*****
P_ABQ55009      63 CAGCACCATGCAGCCCCTGTGGCTCTGCTGGGCACTCTGGGTGTTGCCCCCTGGCCAGCCC

ss.DNA33461    121 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA
*****
P_ABQ55009     123 CGGGGCCGCCCTGACCGGGGAGCAGCTCCTGGGCAGCCTGCTGCGGCAGCTGCAGCTCAA

ss.DNA33461    181 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG
*****
P_ABQ55009     183 AGAGGTGCCCACCCTGGACAGGGCCGACATGGAGGAGCTGGTCATCCCCACCCACGTGAG

ss.DNA33461    241 GGCCAGTACGTGGCCCTGCTGCAGCGCAGCCACGGGGACCGCTCCCGCGGAAAGAGGTT
*****
P_ABQ55009     243 GGCCAGTACGTGGCCCTGCTGCAGCGCARCCACGGGGACCGCTCCCGCGGAAAGAGGTT

ss.DNA33461    301 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT
*****
P_ABQ55009     303 CAGCCAGAGCTTCCGAGAGGTGGCCGGCAGGTTCTTGGCGTTGGAGGCCAGCACACACCT

ss.DNA33461    361 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT
*****
P_ABQ55009     363 GCTGGTGTTCGGCATGGAGCAGCGGTGCCGCCAACAGCGAGCTGGTGCAGGCCGTGCT

ss.DNA33461    421 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC
*****
P_ABQ55009     423 GCGGCTCTTCCAGGAGCCGGTCCCCAAGGCCGCGCTGCACAGGCACGGGCGGCTGTCCCC

ss.DNA33461    481 GCGCAGCGCCCGGGCCCGGTGACCGTCGAGTGGCTGCGCGTCCGCGACGACGGCTCCAA
*****
P_ABQ55009     483 GCGCAGC--CCGGGCCCGGGTGAMCGTCGAGTGGCTKCGCGTCCGCGACGACGGCTYCAA

ss.DNA33461    541 CCGCACCTCCCTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT
*****
P_ABQ55009     541 MCGCACTTCNTCATCGACTCCAGGCTGGTGTCCGTCCACGAGAGCGGCTGGAAGGCCTT

ss.DNA33461    601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGTGCT
*****
P_ABQ55009     601 CGACGTGACCGAGGCCGTGAACCTTCTGGCAGCAGCTGAGCCGGCCCCCGGCAGCCGTGCT

ss.DNA33461    661 GCTACAGGTGTGCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT
*****
P_ABQ55009     661 GCTACAGGTGTGCGGTGCAGAGGGAGCATCTGGGCCCGCTGGCGTCCGGCGCCCAAGCT

ss.DNA33461    721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
*****
P_ABQ55009     721 GGTCCGCTTTGCCTCGCAGGGGGGCCAGCCGGGCTTGGGGAGCCCCAGCTGGAGCTGCA
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ss.DNA33461 781 CACCCTGGACCTTGGGGACTATGGAGCTCAGGGCGACTGTGACCCTGAAGCACCAATGAC

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 ss.DNA33461 841 CGAGGGCACCCGCTGCTGCCGCCAGGAGATGTACATTGACCTGCAGGGGATGAAGTGGGC

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 ss.DNA33461 901 CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 P_ABQ55009 901 CGAGAACTGGGTGCTGGAGCCCCGGGCTTCCTGGCTTATGAGTGTGTGGGCACCTGCCG

 ss.DNA33461 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 P_ABQ55009 961 GCAGCCCCCGGAGGCCCTGGCCTTCAAGTGGCCGTTTCTGGGGCCTCGACAGTGCATCGC

 ss.DNA33461 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 P_ABQ55009 1021 CTCGGAGACTGACTCGCTGCCCATGATCGTCAGCATCAAGGAGGGAGGCAGGACCAGGCC

 ss.DNA33461 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 P_ABQ55009 1081 CCAGGTGGTCAGCCTGCCCCAACATGAGGGTGCAGAAGTGCAGCTGTGCCTCGGATGGTGC

 ss.DNA33461 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 P_ABQ55009 1141 GCTCGTGCCAAGGAGGCTCCAGCCATAGGCGCCTAGTGTAGCCATCGAGGGACTTGACTT

 ss.DNA33461 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 P_ABQ55009 1201 GTGTGTGTTTCTGAAGTGTTTCGAGGGTACCAGGAGAGCTGGCGATGACTGAACTGCTGAT

 ss.DNA33461 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

 P_ABQ55009 1261 GGACAAATGCTCTGTGCTCTCTAGTGAGCCCTGAATTTGCTTCCTCTGACAAGTTACCTC

 ss.DNA33461 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

 P_ABQ55009 1321 ACCTAATTTTTGCTTCTCAGGAATGAGAATCTTTGGCCACTGGAGAGCCCTTGCTCAGTT

 ss.DNA33461 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

 P_ABQ55009 1381 TTCTCTATTCTTATTATTCACTGCACTATATTCTAAGCACTTACATGTGGAGATACTGTA

 ss.DNA33461 1441 ACCTGAGGGCAGAAAGCCANTGTGTCAATTGTTTACTTGTCTGTCACTGGATCTGGGCT

 P_ABQ55009 1441 ACCTGAGGGCAGAAAGCCCAATGTGTCAATTGTTTACTTGTCTGTCACTGGATCTGGGCT

 ss.DNA33461 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

 P_ABQ55009 1501 AAAGTCCTCCACCACCACTCTGGACCTAAGACCTGGGGTTAAGTGTGGGTGTGCATCCC

 ss.DNA33461 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

 P_ABQ55009 1561 CAATCCAGATAATAAAGACTTTGTAAAACATGAATAAAACACATTTTATTCTAAAA

GenBank (Release 137, aug 2003)

P_ACD23222 Human PRO polynucleotide #20. 616 bp, cDNA, PAT 26-AUG-2003

ACCESSION P_ACD23222

KEYWORDS Human; PRO; gene; ss; Parkinson's disease; Alzheimer's disease; ALS; amyotrophic lateral sclerosis; neuropathy; cancer; viral infection; AIDS; Usher's syndrome; haemorrhage; enterocolitis; Zollinger-Ellison syndrome; gastrointestinal ulceration; congenital microvillus atrophy; psoriasis; skin disease; endometrial bleeding; angiogenesis; ischaemic condition; asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disease; atherosclerosis; infertility; birth defect; premature aging; stroke; diabetic complication; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi, A., Botstein, D., Desnoyers, L., Eaton, D.L., Ferrara, N., Filvaroff, E., Fong, S., Gao, W., Gerber, H., Gerritsen, M.E., Goddard, A., Godowski, P.J., Grimaldi, J.C., Gurney, A.L., Hillan, K.J., Kljavin, I.J., Mather, J.P., Pan, J., Paoni, N.F., Roy, M.A., Stewart, T.A., Tumas, D., Williams, P.M., Wood, W.I.

TITLE Novel isolated PRO polypeptides e.g. PRO245 and PRO1868, useful for treating e.g. Parkinson's disease, Alzheimer's disease, amyotrophic lateral sclerosis, cancer, neuropathies, diabetes and psoriasis -

JOURNAL Patent: US2003064367-A1; Filing Date: 13-JUL-2001; 2001US-0904485;

Publication Date: 03-APR-2003; Priority: 10-SEP-1998;

98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
2000WO-US15264. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000;
2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997;
97US-059115P. 17-SEP-1997; 97US-059117P. 17-SEP-1997;
97US-059119P. 17-SEP-1997; 97US-059121P. 17-SEP-1997;
97US-059122P. 17-SEP-1997; 97US-059184P. 18-SEP-1997;
97US-059263P. 18-SEP-1997; 97US-059266P. 15-OCT-1997;
97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997;
97US-062287P. 21-OCT-1997; 97US-063486P. 24-OCT-1997;
97US-062814P. 24-OCT-1997; 97US-062816P. 24-OCT-1997;
97US-063045P. 24-OCT-1997; 97US-063120P. 24-OCT-1997;
97US-063121P. 24-OCT-1997; 97US-063127P. 24-OCT-1997;
97US-063128P. 27-OCT-1997; 97US-063327P. 27-OCT-1997;
97US-063329P. 28-OCT-1997; 97US-063541P. 28-OCT-1997;
97US-063542P. 28-OCT-1997; 97US-063544P. 28-OCT-1997;
97US-063549P. 28-OCT-1997; 97US-063550P. 28-OCT-1997;
97US-063564P. 29-OCT-1997; 97US-063435P. 29-OCT-1997;
97US-063704P. 29-OCT-1997; 97US-063732P. 29-OCT-1997;
97US-063734P. 29-OCT-1997; 97US-063735P. 29-OCT-1997;

97US-063738P. 29-OCT-1997; 97US-064215P. 31-OCT-1997;
 97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
 97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
 97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;
 97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
 97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
 97US-066770P. 24-NOV-1997; 97US-066772P. 25-NOV-1997;
 97US-066840P. 12-DEC-1997; 97US-069425P. 04-JUN-1998;
 98US-088026P. 10-SEP-1998; 98US-099803P. 14-SEP-1998;
 98US-100262P. 17-SEP-1998; 98US-100858P. 13-OCT-1998;
 98US-104080P. 20-NOV-1998; 98US-109304P. 22-DEC-1998;
 98US-113296P. 07-JUL-1999; 99US-143048P. 26-JUL-1999;
 99US-145698P. 28-JUL-1999; 99US-146222P. 18-SEP-2000;

2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-567176/53. P-PSDB; ABO17513; Patent Format: Claim 2; Fig
 41; 477pp; English.

COMMENT The invention relates to human PRO polypeptides and the
 polynucleotides encoding them. The polypeptides and polynucleotides
 are used for treating diseases related to growth or survival of
 nerve cells such as Parkinson's disease, Alzheimer's disease,
 amyotrophic lateral sclerosis (ALS) and neuropathies, diseases
 related to uncontrolled cell growth such as cancer, viral
 infections, Usher's syndrome, haemorrhage, enterocolitis,
 Zollinger-Ellison syndrome, gastrointestinal ulceration, congenital
 microvillus atrophy, skin diseases such as psoriasis and epithelial
 cancers, endometrial bleeding, angiogenesis, ischaemic conditions,
 asthma, rheumatoid arthritis, multiple sclerosis, inflammatory
 diseases, atherosclerosis, cardiac injury, infertility, birth
 defects, premature aging, AIDS, stroke and diabetic complications.
 The polynucleotides are also useful in chromosome and gene mapping.
 This sequence represents a human PRO polynucleotide of the
 invention.

FEATURES Location/Qualifiers
 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

P_ABX71541 Human cDNA encoding secreted/transmembrane protein PRO317. 616 bp,
 cDNA, PAT 10-MAR-2003

ACCESSION P_ABX71541

KEYWORDS Human; PRO; secreted protein; transmembrane protein; enterocolitis;
 gastrointestinal ulceration; skin disease; ss; gene; abnormal
 keratinocyte differentiation; psoriasis; epithelial cancer; squamous
 cell carcinoma; Alzheimer's disease; Parkinson's disease;
 amyotrophic lateral sclerosis; inflammatory disease; rheumatoid
 arthritis; asthma; multiple sclerosis; organ failure;
 atherosclerosis; cardiac injury; infertility; birth defect;
 premature aging; AIDS; acquired immunodeficiency syndrome; cancer;
 diabetic complication; wound repair; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.
 Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E.,
 Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L.,
 Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,
 Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease -

JOURNAL Patent: US2002132240-A1; Filing Date: 18-JUL-2001; 2001US-0909320; Publication Date: 19-SEP-2002; Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998; 98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998; 98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999; 99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999; 99WO-US21547. 05-OCT-1999; 99WO-US23089. 01-DEC-1999; 99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999; 99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999; 99WO-US30911. 20-DEC-1999; 99WO-US30999. 06-JAN-2000; 2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000; 2000WO-US04414. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000; 2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997; 97US-059115P. 17-SEP-1997; 97US-059117P. 15-OCT-1997; 97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997; 97US-062287P. 21-OCT-1997; 97US-063486P. 24-OCT-1997; 97US-062814P. 24-OCT-1997; 97US-062816P; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI; 2003-147434/14. P-PSDB; ABU54366; Patent Format: Claim 2; Fig 41; 473pp; English.

COMMENT The invention relates to an isolated PRO polypeptide having at least 80% amino acid sequence identity to: (a) any one of 61 fully defined amino acid sequences given in the specification (appearing as ABU54347- ABU54407); (b) an amino acid sequence encoded by the nucleotide sequence deposited under American Type Culture Collection (accession numbers listed in the specification); (c) any one of the PRO sequences which lacks its associated signal peptide; (d) an extracellular domain of the PRO polypeptide with its associated signal peptide; or (e) an extracellular domain of the PRO polypeptide which lacks its associated signal peptide. Also include are the nucleic acids encoding the PRO polypeptides, vectors, host cells and anti-PRO antibodies. The PRO polypeptides and nucleic acids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g. rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, diabetic complications, or mutations in general. The polypeptides are also useful for wound repair and associated therapies concerned with re-growth of tissue. The nucleotide sequences may be used as hybridisation probes in chromosome and gene mapping, or in generating antisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in assays to identify other proteins or molecules involved in binding reaction, to generate transgenic animals or knockout animals, which in turn are useful in the development and screening of therapeutically useful reagents, for chromosome identification, and tissue typing. The PRO polypeptides and nucleic acid molecules are also useful in gene therapy, and as molecular weight markers for protein electrophoresis purposes. The anti-PRO antibodies may be used in diagnostic assays for PRO, or for the affinity purification of PRO from recombinant cell culture or natural sources. The present

sequence encodes a PRO polypeptide.

FEATURES Location/Qualifiers
BASE COUNT 294 a 497 c 506 g 318 t 1 others
ORIGIN

P_ACD20098 Human secreted / transmembrane polypeptide PRO317 cDNA. 616 bp,
cDNA, PAT 25-AUG-2003

ACCESSION P_ACD20098

KEYWORDS Human; ss; gene; gene therapy; tumour; tissue typing; obesity;
diabetes; hypoinsulinaemia; hyperinsulinaemia; vascular
permeability; cardiac insufficiency disorder; immune response;
regeneration; cartilage; auditory hair cell; hearing loss; bone
disorder; sports injury; arthritis; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.
Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E.,
Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L.,
Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,
Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I..

TITLE Novel secreted and transmembrane polypeptide for modulating
biological activity of cell expressing the polypeptide, identifying
agonists or antagonists of polypeptide, and as molecular weight
markers

JOURNAL Patent: US2003036060-A1; Filing Date: 12-JUL-2001; 2001US-0904859;
Publication Date: 20-FEB-2003; Priority: 10-SEP-1998;
98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
2000WO-US15264. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000;
2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997;
97US-059115P. 17-SEP-1997; 97US-059117P. 17-SEP-1997;
97US-059119P. 17-SEP-1997; 97US-059121P. 17-SEP-1997;
97US-059122P. 17-SEP-1997; 97US-059184P. 18-SEP-1997;
97US-059263P. 18-SEP-1997; 97US-059266P. 15-OCT-1997;
97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997;
97US-062287P. 21-OCT-1997; 97US-063486P. 24-OCT-1997;
97US-062814P. 24-OCT-1997; 97US-062816P. 24-OCT-1997;
97US-063045P. 24-OCT-1997; 97US-063120P. 24-OCT-1997;
97US-063121P. 24-OCT-1997; 97US-063127P. 24-OCT-1997;
97US-063128P. 27-OCT-1997; 97US-063327P. 27-OCT-1997;
97US-063329P. 28-OCT-1997; 97US-063541P. 28-OCT-1997;
97US-063542P. 28-OCT-1997; 97US-063544P. 28-OCT-1997;
97US-063549P. 28-OCT-1997; 97US-063550P. 28-OCT-1997;
97US-063564P. 29-OCT-1997; 97US-063435P. 29-OCT-1997;
97US-063704P. 29-OCT-1997; 97US-063732P. 29-OCT-1997;

97US-063734P. 29-OCT-1997; 97US-063735P. 29-OCT-1997;
 97US-063738P. 29-OCT-1997; 97US-064215P. 31-OCT-1997;
 97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
 97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
 97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;
 97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
 97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
 97US-066770P. 24-NOV-1997; 97US-066772P. 25-NOV-1997;
 97US-066840P. 12-DEC-1997; 97US-069425P. 04-JUN-1998;
 98US-088026P. 10-SEP-1998; 98US-099803P. 14-SEP-1998;
 98US-100262P. 17-SEP-1998; 98US-100858P. 13-OCT-1998;
 98US-104080P. 20-NOV-1998; 98US-109304P. 22-DEC-1998;
 98US-113296P. 07-JUL-1999; 99US-143048P. 26-JUL-1999;
 99US-145698P. 28-JUL-1999; 99US-146222P. 18-SEP-2000;
 2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-417923/39. P-PSDB; ABO14884; Patent Format: Claim 2; Fig
 41; 469pp; English.

COMMENT The invention relates to an isolated, secreted and transmembrane polypeptide, termed PRO polypeptide. The polypeptide is useful for identifying agonists or antagonists of the polypeptide, for preparing variants of the polypeptide, as molecular weight markers for protein electrophoresis purpose and the nucleic acid is useful for recombinantly expressing those markers. The polypeptide is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. The nucleic acid is useful as hybridisation probes, in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, to construct hybridisation probes for mapping the gene which encodes the PRO and for the genetic analysis of individuals with genetic disorders, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes for polymerase chain reaction (PCR), Northern analysis, Southern analysis and Western analysis. PRO antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The polypeptide or its antibody is useful for the preparation of medicament for treating conditions which is responsive to the PRO polypeptide or anti-PRO antibody e.g. tumour. The polypeptide and the nucleic acid is useful for tissue typing. The polypeptide is useful for treating obesity, diabetes or hypo- or hyper-insulinaemia and cardiac insufficiency disorders, for inhibiting tumour growth, enhances vascular permeability and immune response, for inducing regeneration of auditory hair cells and for treating hearing loss in mammals and for treating bone and/or cartilage disorders such as sports injuries and arthritis. The present sequence represents cDNA encoding a human secreted and transmembrane PRO polypeptide.

FEATURES Location/Qualifiers
 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

P_AAF72392 Human PRO317 cDNA. 616 bp, cDNA, PAT 24-APR-2001
 ACCESSION P_AAF72392

KEYWORDS Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory; antiparkinsonian nootropic; neuroprotective; vulnerary; cardiant; antiangiogenic; vasotropic; antiasthmatic; antirheumatic; cancer; antiarthritic; antiinfertility; antidiabetic; antiviral; diabetes; ophthalmological; gene therapy; skin disease; gastrointestinal disorder; ischaemia; inflammation; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A.J., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N. Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E., Goddard,A. Godowski,P.J., Grimaldi,C.J., Gurney,A.L., Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F., Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE Sixty one nucleic acids encoding PRO polypeptides which are useful in the treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's disease) -

JOURNAL Patent: WO200104311-A1; Filing Date: 22-FEB-2000; 2000WO-US04414; Publication Date: 18-JAN-2001; Priority: 07-JUL-1999; 99US-0143048. 26-JUL-1999; 99US-0145698. 28-JUL-1999; 99US-0146222. 08-SEP-1999; 99WO-US20594. 13-SEP-1999; 99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999; 99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999; 99WO-US28214. 30-NOV-1999; 99WO-US28313. 16-DEC-1999; 99WO-US30095. 20-DEC-1999; 99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000; 99WO-US00219; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI; 2001-081051/09. P-PSDB; AAB80231; Patent Format: Claim 2; Fig. 41; 393pp; English.

COMMENT The present sequence is one of sixty one nucleic acids encoding novel secreted and transmembrane PRO polypeptides. The PRO polypeptides are useful for treating skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma), gastrointestinal disorders (e.g. enterocolitis), neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair, cardiovascular disorders (e.g. endometrial bleeding angiogenesis, ischaemias such as coronary ischaemia, atherosclerosis), inflammatory disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis), infertility, AIDS and diabetes and retinal disorders such as retinitis pigmentosum. The PRO nucleic acids have applications in molecular biology, including use as hybridization probes, and in chromosome and gene mapping.

FEATURES Location/Qualifiers

BASE COUNT 294 a 497 c 506 g 318 t 1 others
ORIGIN

P_AAF60376 PRO317 coding sequence. 616 bp, cDNA, PAT 27-APR-2001

ACCESSION P_AAF60376

KEYWORDS Cytostatic; PRO protein; tumour; cancer; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Botstein,D., Goddard,A., Gurney,A.L., Hillan,K.J., Roy,M.A., Wood,W.I.

TITLE New antibody that binds to a PRO polypeptide, e.g. PRO187 and

PRO533, useful for diagnosing and treating cancers -

JOURNAL Patent: WO200105836-A1; Filing Date: 20-DEC-1999; 99WO-US30999;
Publication Date: 25-JAN-2001; Priority: 20-JUL-1999;
99US-0144758. 26-JUL-1999; 99US-0145698. 08-SEP-1999;
99WO-US20594. 13-SEP-1999; 99WO-US20944. 15-SEP-1999;
99WO-US21090. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
99WO-US28214. 30-NOV-1999; 99WO-US28313. 02-DEC-1999;
99WO-US28564; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI;
2001-091968/10. P-PSDB; AAB68600; Patent Format: Claim 50; Fig 17;
196pp; English.

COMMENT The present invention relates to PRO proteins and coding sequences.
The present sequence is the coding sequence for one such PRO
protein. It was found that the PRO genes are amplified in the genome
of tumour cells. The gene amplification is expected to be associated
with the overexpression of the gene product and contributes to
tumourigenesis. Therefore, antagonists of PRO proteins are useful
for the treatment of benign or malignant tumours, leukaemias,
lymphoid malignancies and other disorders such as neuronal, glial,
astrocytal, hypothalamic, glandular, epithelial, inflammatory and
immunologic disorders.

FEATURES Location/Qualifiers

BASE COUNT	294 a	497 c	506 g	318 t	1 others
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ORIGIN

P_AAA30056 Human PRO317 nucleotide sequence. 616 bp, cDNA, PAT 09-AUG-2000

ACCESSION P_AAA30056

KEYWORDS Antibody; PRO187; PRO533; PRO214; PRO240; PRO211; PRO230; PRO261;
PRO246; PRO317; tumour growth inhibitor; cancer; diagnosis;
treatment; human; cell growth; proliferation; transforming growth
factor; ADEPT; antibody dependent enzyme mediated prodrug therapy;
patent; GENESQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Goddard,A., Gurney,A.L., Hillan,K.J., Roy,M.A., Wood,W.I.,
Botstein,D.

TITLE New isolated antibodies which bind to specific polypeptides used for
diagnosis and treatment of neoplastic cell growth and proliferation

JOURNAL Patent: WO200015666-A2; Filing Date: 08-SEP-1999; 99WO-US20594;
Publication Date: 23-MAR-2000; Priority: 10-SEP-1998;
98US-0099803. 10-SEP-1998; 98WO-US18824; Assignee: (GETH)
GENENTECH INC; Cross Reference: WPI; 2000-271386/23. P-PSDB;
AAY88575; Patent Format: Example 9; Fig 17; 200pp; English.

COMMENT This sequence represents a human PRO317 nucleotide sequence. PRO317
shares sequence homology with members of the transforming growth
factor beta superfamily of proteins. The invention relates to
isolated antibodies which bind to a polypeptide. The "PRO"
polypeptides are encoded by genes which are over expressed in the
genome of tumour cells. Vectors and host cells comprising the
nucleic acid encoding the antibodies are used in the production of
the antibodies. The antibodies and nucleic acids encoding them are
used for diagnosing a tumour in a mammal. The antibodies are used
for inhibiting the growth of tumour cells and identifying compounds
that inhibit a biological or immunological activity of and/or
expression of a PRO187, PRO533, PRO214, PRO240, PRO211, PRO230,
PRO261, PRO246 or PRO317 polypeptide. The antibody can be used in

antibody dependent enzyme mediated prodrug therapy (ADEPT) by conjugating the antibody to a prodrug-activating enzyme which converts a prodrug to an anti-cancer drug. The antibodies can be fluorescently labelled and monitored by light microscopy, flow cytometry or fluorimetry for diagnosis and prognosis of tumours.

FEATURES Location/Qualifiers
BASE COUNT 294 a 497 c 506 g 318 t 1 others
ORIGIN

P_AAX28437 EGF-like homologue EBAF-2 coding sequence. 616 bp,
DNA, PAT 22-JUN-1999

ACCESSION P_AAX28437

KEYWORDS Antibody; PRO187; PRO533; PRO214; PRO240; PRO211; PRO230; PRO261;
PRO246; EBAF-2; inhibitor; tumour growth; cancer; EGF-like
homologue; FGF-8 homologue; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Botstein,D., Goddard,A., Gurney,A., Hillan,K., Lawrence,D.A.
Roy,M., Wood,W.I.

TITLE Antibodies against specific proteins overexpressed in tumours

JOURNAL Patent: WO9914327-A2; Filing Date: 10-SEP-1998; 98WO-US18824;
Publication Date: 25-MAR-1999; Priority: 25-NOV-1997;
97US-0066840. 17-SEP-1997; 97US-0059114. 17-SEP-1997;
97US-0059117. 18-SEP-1997; 97US-0059263. 15-OCT-1997;
97US-0062125. 17-OCT-1997; 97US-0062285. 17-OCT-1997;
97US-0062287. 24-OCT-1997; 97US-0062816. 29-OCT-1997;
97US-0063704; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI;
1999-229532/19. P-PSDB; AAY05287; Patent Format: Example 1; Fig 30;
130pp; English.

COMMENT This sequence encodes the EGF-like homologue EBAF-2: The invention
relates to antibodies (Ab) that bind to any of the polypeptides (I)
designated PRO187; PRO533; PRO214; PRO240; PRO211; PRO230; PRO261;
PRO246 or EBAF-2. The Ab, or other agents that inhibit expression
and/or activity of (I) are used: (i) to inhibit growth of tumours;
and (ii) as diagnostic/prognostic reagents for detection or
quantification of (I) in cells or tissues, by standard immunoassays,
with overexpression being indicative of cancer. For therapeutic use,
the Ab may be conjugated to a toxin, chemotherapeutic agent or
radioisotope. Genes expressing (I), many of which are growth factor
homologues, are overexpressed in some cases of cancer.

FEATURES Location/Qualifiers
BASE COUNT 294 a 497 c 506 g 318 t 1 others
ORIGIN

P_AAX52234 Protein PRO317 cDNA clone DNA33461-1199. 616 bp,
DNA, PAT 25-JUN-1999

ACCESSION P_AAX52234

KEYWORDS Secreted protein; transmembrane protein; human; enterocolitis;
Zollinger-Ellison syndrome; gastrointestinal ulceration; congenital
microvillus atrophy; skin disease; cell growth; abnormal
keratinocyte differentiation; psoriasis; epithelial cancer;
Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
anti-thrombotic; wound healing; tissue repair; patent; GENESEQ
patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Chen,J., Goddard,A., Gurney,A.L., Pennica,D., Wood,W.I., Yuan,J.

TITLE New isolated human genes and polypeptides used in, e.g. treatment of gastrointestinal ulceration

JOURNAL Patent: WO9914328-A2; Filing Date: 16-SEP-1998; 98WO-US19330; Publication Date: 25-MAR-1999; Priority: 25-NOV-1997;
 97US-0066840. 17-SEP-1997; 97US-0059113. 17-SEP-1997;
 97US-0059115. 17-SEP-1997; 97US-0059117. 17-SEP-1997;
 97US-0059119. 17-SEP-1997; 97US-0059121. 17-SEP-1997;
 97US-0059122. 17-SEP-1997; 97US-0059184. 18-SEP-1997;
 97US-0059263. 18-SEP-1997; 97US-0059266. 15-OCT-1997;
 97US-0062125. 17-OCT-1997; 97US-0062285. 17-OCT-1997;
 97US-0062287. 21-OCT-1997; 97US-0063486. 24-OCT-1997;
 97US-0062814. 24-OCT-1997; 97US-0062816. 24-OCT-1997;
 97US-0063045. 24-OCT-1997; 97US-0063120. 24-OCT-1997;
 97US-0063121. 24-OCT-1997; 97US-0063127. 24-OCT-1997;
 97US-0063128. 27-OCT-1997; 97US-0063329. 27-OCT-1997;
 97US-0063327. 28-OCT-1997; 97US-0063541. 28-OCT-1997;
 97US-0063542. 28-OCT-1997; 97US-0063544. 28-OCT-1997;
 97US-0063549. 28-OCT-1997; 97US-0063550. 28-OCT-1997;
 97US-0063564. 29-OCT-1997; 97US-0063435. 29-OCT-1997;
 97US-0063704. 29-OCT-1997; 97US-0063732. 29-OCT-1997;
 97US-0063738. 29-OCT-1997; 97US-0063734. 29-OCT-1997;
 97US-0064215. 29-OCT-1997; 97US-0063735. 31-OCT-1997;
 97US-0063870. 31-OCT-1997; 97US-0064103. 03-NOV-1997;
 97US-0064248. 07-NOV-1997; 97US-0064809. 12-NOV-1997;
 97US-0065186. 17-NOV-1997; 97US-0065846. 18-NOV-1997;
 97US-0065693. 21-NOV-1997; 97US-0066120. 21-NOV-1997;
 97US-0066364. 24-NOV-1997; 97US-0066772. 24-NOV-1997;
 97US-0066466. 24-NOV-1997; 97US-0066770. 24-NOV-1997;
 97US-0066511. 24-NOV-1997; 97US-0066453; Assignee: (GETH)
 GENENTECH INC; Cross Reference: WPI; 1999-229533/19. P-PSDB;
 AAY13363; Patent Format: Claim 2; Fig 41; 320pp; English.

COMMENT AAX52213-74 encode secreted and transmembrane human proteins, and are obtained from cDNA libraries, prepared from fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina. The encoded polypeptides have specific uses based on their homology to known polypeptides, e.g. PRO211 and PRO217 can be used for disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus atrophy), skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous cell carcinoma of the vulva and gliomas), potent effects on cell growth and development, diseases related to growth or survival of nerve cells including Parkinson's disease, Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can be used as an anti-thrombotic agent; PRO287 polypeptides and portions may have therapeutic applications in wound healing and tissue repair; PRO317 can be used for treating problems of the kidney, uterus, endometrium, blood vessels, or related tissue, e.g. in the heart of

genital tract.

FEATURES	Location/Qualifiers				
BASE COUNT	294 a	497 c	506 g	318 t	1 others
ORIGIN					

P_ACA58386 cDNA encoding human PRO polypeptide #20. 616 bp,
cDNA, PAT 10-JUN-2003

ACCESSION P ACA58386

KEYWORDS Human; secreted and transmembrane protein; PRO polypeptide; cancer; Alzheimer's disease; ischaemia; cytostatic; nootropic; vasotropic; neuroprotective; gene; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM *Homo sapiens.*

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi, A., Botstein, D., Desnoyers, L., Eaton, D. L., Ferrara, N.,
Filvaroff, E., Fong, S., Gao, W., Gerber, H., Gerritsen, M. E.,
Goddard, A. Godowski, P. J., Grimaldi, J. C., Gurney, A. L.,
Hillan, K. J., Kljavin, I. J., Mather, J. P., Pan, J., Paoni, N. F.,
Roy, M. A., Stewart, T. A., Tumas, D. Williams, P. M., Wood, W. I.

TITLE New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO245 or PRO1868, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy -

JOURNAL Patent: US2002192659-A1; Filing Date: 10-JUL-2001; 2001US-0902853;
Publication Date: 19-DEC-2002; Priority: 10-SEP-1998;

98WO-US18824. 14-SEP-1998;	98WO-US19177. 16-SEP-1998;
98WO-US19330. 17-SEP-1998;	98WO-US19437. 01-DEC-1998;
98WO-US25108. 08-SEP-1999;	99WO-US20594. 13-SEP-1999;
99WO-US20944. 15-SEP-1999;	99WO-US21090. 15-SEP-1999;
99WO-US21547. 05-OCT-1999;	99WO-US23089. 01-DEC-1999;
99WO-US28301. 02-DEC-1999;	99WO-US28564. 02-DEC-1999;
99WO-US28565. 16-DEC-1999;	99WO-US30095. 20-DEC-1999;
99WO-US30911. 20-DEC-1999;	99WO-US30999. 05-JAN-2000;
2000WO-US00219. 11-FEB-2000;	2000WO-US03565. 22-FEB-2000;
2000WO-US04414. 28-JUL-2000;	2000WO-US20710. 24-AUG-2000;
2000WO-US23328. 17-SEP-1997;	97US-059113P. 17-SEP-1997;
97US-059115P. 17-SEP-1997;	97US-059117P. 18-SEP-1997;
97US-059266P. 15-OCT-1997;	97US-062125P. 17-OCT-1997;
97US-062285P. 17-OCT-1997;	97US-062287P. 21-OCT-1997;
97US-063486P. 24-OCT-1997;	97US-062814P. 24-OCT-1997;

97US-062816P; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI;
2003-361832/34. P-PSDB; ABU71464; Patent Format: Claim 2; Fig 41;
474pp; English.

COMMENT The present invention relates to the isolation of novel human secreted and transmembrane proteins (PRO polypeptides), and the polynucleotide sequences encoding them. The polynucleotide sequences are useful in molecular biology, as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy. The polynucleotide sequences may also be used in preparing PRO polypeptides by recombinant techniques, and in generating either transgenic animals or knock-out animals which, in turn, are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or their antibodies are useful in preparing a medicament for treating a condition responsive to the polypeptide or antibody, such as cancer, Alzheimer's disease or ischaemia, and in various diagnostic assays. The present sequence encodes a human PRO polypeptide of the invention.

FEATURES	Location/Qualifiers
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BASE COUNT 294 a 497 c 506 g 318 t 1 others
ORIGIN

P_ACA60093 Human cDNA for secreted/transmembrane protein PRO317. 616 bp,
cDNA, PAT 12-JUN-2003

ACCESSION P_ACA60093

KEYWORDS Human; ss; gene; secreted protein; transmembrane protein; PRO; gene
therapy; chromosome identification; chromosome marker; patent;
GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.
Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E.,
Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L.,
Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,
Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE New transmembrane polypeptides and nucleic acids encoding the
polypeptides, useful in gene therapy, in chromosome identification,
as chromosome markers, in generating probes and in tissue typing -

JOURNAL Patent: US2003003530-A1; Filing Date: 11-JUL-2001; 2001US-0904011;
Publication Date: 02-JAN-2003; Priority: 10-SEP-1998;

98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
2000WO-US15264. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000;
2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997;
97US-059115P. 17-SEP-1997; 97US-059117P. 17-SEP-1997;
97US-059119P. 17-SEP-1997; 97US-059121P. 17-SEP-1997;
97US-059122P. 17-SEP-1997; 97US-059184P. 18-SEP-1997;
97US-059263P. 18-SEP-1997; 97US-059266P. 15-OCT-1997;
97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997;
97US-062287P. 21-OCT-1997; 97US-063486P. 24-OCT-1997;
97US-062814P. 24-OCT-1997; 97US-062816P. 24-OCT-1997;
97US-063045P. 24-OCT-1997; 97US-063120P. 24-OCT-1997;
97US-063121P. 24-OCT-1997; 97US-063127P. 24-OCT-1997;
97US-063128P. 27-OCT-1997; 97US-063327P. 27-OCT-1997;
97US-063329P. 28-OCT-1997; 97US-063541P. 28-OCT-1997;
97US-063542P. 28-OCT-1997; 97US-063544P. 28-OCT-1997;
97US-063549P. 28-OCT-1997; 97US-063550P. 28-OCT-1997;
97US-063564P. 29-OCT-1997; 97US-063435P. 29-OCT-1997;
97US-063704P. 29-OCT-1997; 97US-063732P. 29-OCT-1997;
97US-063734P. 29-OCT-1997; 97US-063735P. 29-OCT-1997;
97US-063738P. 29-OCT-1997; 97US-064215P. 31-OCT-1997;
97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;

97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
 97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
 97US-066770P. 24-NOV-1997; 97US-066772P. 18-SEP-2000;
 2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-329602/31. P-PSDB; ABU71910; Patent Format: Claim 2; Fig
 41; 484pp; English.

COMMENT The invention relates to an isolated nucleic acid with at least 80% nucleic acid sequence identity to a nucleotide sequence encoding one of 61 secreted/transmembrane polypeptides, or PRO polypeptides or encoding a PRO protein extracellular domain. Also included are a vector comprising the PRO nucleic acid, a host cell comprising the vector, producing a PRO polypeptide (by culturing the host cell for the expression of the PRO polypeptide, and recovering the PRO polypeptide from the cell culture), an isolated PRO polypeptide (having at least 80% sequence identity to: (a) an amino acid sequence selected from the 61 PRO proteins; (b) an amino acid sequence encoded by a nucleic acid molecule deposited with an ATCC number (detailed in the specification); or (c) an extracellular domain of a PRO polypeptide or to a PRO polypeptide lacking its associated signal peptide), a chimaeric molecule comprising a PRO polypeptide of fused to a heterologous amino acid sequence, an anti-PRO antibody, detecting a PRO245 or PRO1868 in a sample suspected of containing the polypeptide, linking a bioactive molecule to a cell expressing a PRO245 or PRO1868 and modulating at least one biological activity of a cell expressing a PRO245 or PRO1868. Nucleic acids which encode PRO can be used to generate either transgenic animals or knock-out animals which may be used in the development and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy, in chromosome identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for PRO, and in affinity purification of PRO from recombinant cell culture or natural sources. The present sequence encodes a PRO protein.

FEATURES Location/Qualifiers
 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

P_ACA05431 cDNA encoding human secreted protein PRO317. 616 bp,
 cDNA, PAT 29-MAY-2003

ACCESSION P_ACA05431

KEYWORDS Human; gene therapy; mucosal lesion; ulcer; enterocolitis; skin disease; psoriasis; cancer; lung cancer; colon cancer; nerve cell disease; Alzheimer's disease; Parkinson's disease; Usher syndrome; angiogenesis; atrophica areata; inflammatory disease; asthma; rheumatoid arthritis; ischaemia; ss; gene; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N. Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E., Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L., Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,

Roy, M.A., Stewart, T.A., Tumas, D. Williams, P.M., Wood, W.I.
TITLE Sixty one isolated nucleic acids encoding a PRO polypeptide, e.g.
PRO245 or PRO1868, useful in chromosome and gene mapping, in
generating antisense RNA and DNA, and in treating cancer and
Alzheimer's disease -

JOURNAL Patent: US2003023054-A1; Filing Date: 16-JUL-2001; 2001US-0906742;
Publication Date: 30-JAN-2003; Priority: 10-SEP-1998;
98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
2000WO-US15264. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000;
2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997;
97US-059115P. 17-SEP-1997; 97US-059117P. 17-SEP-1997;
97US-059119P. 17-SEP-1997; 97US-059121P. 17-SEP-1997;
97US-059122P. 17-SEP-1997; 97US-059184P. 18-SEP-1997;
97US-059263P. 18-SEP-1997; 97US-059266P. 15-OCT-1997;
97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997;
97US-062287P. 21-OCT-1997; 97US-063486P. 24-OCT-1997;
97US-062814P. 24-OCT-1997; 97US-062816P. 24-OCT-1997;
97US-063045P. 24-OCT-1997; 97US-063120P. 24-OCT-1997;
97US-063121P. 24-OCT-1997; 97US-063127P. 24-OCT-1997;
97US-063128P. 27-OCT-1997; 97US-063327P. 27-OCT-1997;
97US-063329P. 28-OCT-1997; 97US-063541P. 28-OCT-1997;
97US-063542P. 28-OCT-1997; 97US-063544P. 28-OCT-1997;
97US-063549P. 28-OCT-1997; 97US-063550P. 28-OCT-1997;
97US-063564P. 29-OCT-1997; 97US-063435P. 29-OCT-1997;
97US-063704P. 29-OCT-1997; 97US-063732P. 29-OCT-1997;
97US-063734P. 29-OCT-1997; 97US-063735P. 29-OCT-1997;
97US-063738P. 29-OCT-1997; 97US-064215P. 31-OCT-1997;
97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;
97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
97US-066770P. 24-NOV-1997; 97US-066772P. 25-NOV-1997;
97US-066840P. 12-DEC-1997; 97US-069425P. 04-JUN-1998;
98US-088026P. 10-SEP-1998; 98US-099803P. 14-SEP-1998;
98US-100262P. 17-SEP-1998; 98US-100858P. 13-OCT-1998;
98US-104080P. 20-NOV-1998; 98US-109304P. 22-DEC-1998;
98US-113296P. 07-JUL-1999; 99US-143048P. 26-JUL-1999;
99US-145698P. 28-JUL-1999; 99US-146222P. 18-SEP-2000;
2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
WPI; 2003-331485/31. P-PSDB; ABU67364; Patent Format: Example 18;
Fig 41; 481pp; English.

COMMENT The invention relates to sixty one nucleic acids encoding PRO
polypeptides (secreted and transmembrane). The polynucleotide is

useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy. The polynucleotide may also be used in preparing PRO polypeptides by recombinant techniques, and in generating either transgenic animals or knock-out animals which, in turn, are useful in the development and screening of therapeutically useful reagents. The PRO polypeptide or the antibody is used in preparing a medicament for treating a condition responsive to the polypeptide or antibody, such as mucosal lesions e.g. ulcers and enterocolitis, skin disease e.g. psoriasis, cancer e.g. lung cancer and colon cancer, nerve cell disease e.g. Alzheimer's disease and Parkinson's disease, Usher syndrome, atrophica areata, angiogenesis; inflammatory disease e.g. asthma and rheumatoid arthritis, ischaemia, and in various diagnostic assays. The present sequence represents an cDNA which encodes a PRO polypeptide.

FEATURES Location/Qualifiers
 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

P_ABX96110 Human secreted/transmembrane protein cDNA, #22. 616 bp,
 cDNA, PAT 13-MAY-2003

ACCESSION P_ABX96110

KEYWORDS Human; gene; ss; PRO; secreted; transmembrane; pharmaceutical;
 diagnostic; biosensor; bioreactor; therapeutic; hyperplasia;
 endometriosis; cancer; tumour; ischaemia; coronary arterial disease;
 polycystic kidney disease; renal failure; inflammatory response;
 asthma; rheumatoid arthritis; psoriasis; multiple sclerosis; gene
 therapy; cytostatic; gynecological; cardiant; nephrotropic;
 hepatotropic; antiinflammatory; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1. (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.
 Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E.,
 Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L.,
 Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,
 Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE New secreted and transmembrane PRO polypeptides (e.g. PRO533 or
 PRO245) and genes encoding them, useful for detecting or treating
 e.g. hyperplasia, endometriosis, cancers, ischemia, coronary
 arterial disease or inflammations -

JOURNAL Patent: US2002160374-A1; Filing Date: 12-JUL-2001; 2001US-0905291;
 Publication Date: 31-OCT-2002; Priority: 10-SEP-1998;
 98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
 98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
 98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
 99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
 99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
 99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
 99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
 99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
 99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
 2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
 2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
 2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
 2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
 2000WO-US15264. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000;

2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997;
 97US-059115P. 17-SEP-1997; 97US-059117P. 17-SEP-1997;
 97US-059119P. 17-SEP-1997; 97US-059121P. 17-SEP-1997;
 97US-059122P. 17-SEP-1997; 97US-059184P. 18-SEP-1997;
 97US-059263P. 18-SEP-1997; 97US-059266P. 15-OCT-1997;
 97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997;
 97US-062287P. 21-OCT-1997; 97US-063486P. 24-OCT-1997;
 97US-062814P. 24-OCT-1997; 97US-062816P. 24-OCT-1997;
 97US-063045P. 24-OCT-1997; 97US-063120P. 24-OCT-1997;
 97US-063121P. 24-OCT-1997; 97US-063127P. 24-OCT-1997;
 97US-063128P. 27-OCT-1997; 97US-063327P. 27-OCT-1997;
 97US-063329P. 28-OCT-1997; 97US-063541P. 28-OCT-1997;
 97US-063542P. 28-OCT-1997; 97US-063544P. 28-OCT-1997;
 97US-063549P. 28-OCT-1997; 97US-063550P. 28-OCT-1997;
 97US-063564P. 29-OCT-1997; 97US-063435P. 29-OCT-1997;
 97US-063704P. 29-OCT-1997; 97US-063732P. 29-OCT-1997;
 97US-063734P. 29-OCT-1997; 97US-063735P. 29-OCT-1997;
 97US-063738P. 29-OCT-1997; 97US-064215P. 31-OCT-1997;
 97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
 97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
 97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;
 97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
 97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
 97US-066770P. 24-NOV-1997; 97US-066772P. 18-SEP-2000;
 2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-288105/28. P-PSDB; ABU64518; Patent Format: Claim 2; Fig
 41; 477pp; English.

COMMENT

The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. The PRO polypeptides or polynucleotides are also useful as pharmaceuticals, diagnostics, biosensors or bioreactors, for detecting or treating e.g. hyperplasia, endometriosis, cancers (e.g. those involving solid tumours), ischaemia, coronary arterial disease, polycystic kidney disease, chronic or acute renal failure, or inflammatory responses (e.g. asthma, rheumatoid arthritis, psoriasis or multiple sclerosis) in mammals. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequences presented in ABX96017-ABX96378 are the genes encoding, the primers amplifying and the probes detecting the PRO polynucleotides of the invention.

FEATURES

Location/Qualifiers

BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

P_ACA58989 Human PRO polynucleotide #20. 616 bp, cDNA, PAT 16-JUN-2003

ACCESSION P_ACA58989

KEYWORDS Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; pathological disorder; cardiac insufficiency disorder; protein secretion; pancreas; diabetes; gastrointestinal mucosa; mucosal lesion; psoriasis; skin disease; keratinocyte differentiation; epithelial cancer; tumour; lung squamous cell carcinoma; epidermoid carcinoma; vulva; glioma; cytostatic; cardiant; endocrine; antidiabetic; gastrointestinal; antiulcer;

dermatological; vulnerary; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.
 Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E.,
 Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L.,
 Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,
 Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE Isolated nucleic acid useful for e.g., treating pathological
 disorders encodes a secreted or transmembrane protein -

JOURNAL Patent: US2002146709-A1; Filing Date: 18-JUL-2001; 2001US-0909088;
 Publication Date: 10-OCT-2002; Priority: 10-SEP-1998;
 98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
 98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
 98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
 99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
 99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
 99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
 99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
 99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
 99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
 2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
 2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
 2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
 2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
 2000WO-US15264. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000;
 2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997;
 97US-059115P. 17-SEP-1997; 97US-059117P. 17-SEP-1997;
 97US-059119P. 17-SEP-1997; 97US-059121P. 17-SEP-1997;
 97US-059122P. 17-SEP-1997; 97US-059184P. 18-SEP-1997;
 97US-059263P. 18-SEP-1997; 97US-059266P. 15-OCT-1997;
 97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997;
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 97US-063045P. 24-OCT-1997; 97US-063120P. 24-OCT-1997;
 97US-063121P. 24-OCT-1997; 97US-063127P. 24-OCT-1997;
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 97US-063329P. 28-OCT-1997; 97US-063541P. 28-OCT-1997;
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 97US-063704P. 29-OCT-1997; 97US-063732P. 29-OCT-1997;
 97US-063734P. 29-OCT-1997; 97US-063735P. 29-OCT-1997;
 97US-063738P. 29-OCT-1997; 97US-064215P. 31-OCT-1997;
 97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
 97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
 97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;
 97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
 97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
 97US-066770P. 24-NOV-1997; 97US-066772P. 18-SEP-2000;
 2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-328338/31. P-PSDB; ABU71609; Patent Format: Claim 2; Fig
 41; 473pp; English.

COMMENT The invention relates to human PRO polypeptides (secreted or
 transmembrane polypeptides) and the polynucleotides encoding them.

The PRO polypeptides and polynucleotides can be used in treating pathological disorders and tumours, in therapeutic treatment of cardiac insufficiency disorders and in therapeutic treatment of disorders involving protein secretion by the pancreas, including diabetes. They can also be used in treating disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, and skin diseases associated with abnormal keratinocyte differentiation (e.g., psoriasis, epithelial cancers such as lung squamous cell carcinoma, epidermoid carcinoma of the vulva and gliomas). The sequences can be used as molecular markers for protein electrophoresis purposes and can be utilised in protein-protein binding assays, biochemical screening assays, immunoassays and cell-based assays. This sequence represents a human PRO polynucleotide of the invention.

FEATURES Location/Qualifiers
 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

P_ACD19736 Human secreted / transmembrane polypeptide PRO317 cDNA. 616 bp,
 cDNA, PAT 22-AUG-2003

ACCESSION P_ACD19736

KEYWORDS Human; ss; gene; gene therapy; apoptosis; bleeding; tumour; ALS;
 gynaecological disease; hysterectomy; angiogenesis; skin disease;
 cancer; coronary ischaemic condition; gastrointestinal mucosa
 disorder; asthma; mucosal lesion repair; keratinocyte
 differentiation; psoriasis; Parkinson's disease; Alzheimer's
 disease; amyotrophic lateral sclerosis; neuropathy; blood
 coagulation cascade disorder; thrombosis; haemorrhage;
 neurodegenerative disease; endometrial bleeding; wound healing;
 tissue repair; rheumatoid arthritis; multiple sclerosis; tissue
 typing; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.
 Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E.,
 Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L.,
 Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,
 Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE Novel secreted and transmembrane polypeptides and polynucleotides
 encoding them useful for treating abnormal bleeding involved in
 gynecological diseases, skin diseases and neurodegenerative diseases

JOURNAL Patent: US2003027143-A1; Filing Date: 16-JUL-2001; 2001US-0906838;
 Publication Date: 06-FEB-2003; Priority: 10-SEP-1998;
 98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
 98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
 98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
 99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
 99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
 99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
 99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
 99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
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 97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
 97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
 97US-066770P. 24-NOV-1997; 97US-066772P. 25-NOV-1997;
 97US-066840P. 12-DEC-1997; 97US-069425P. 04-JUN-1998;
 98US-088026P. 10-SEP-1998; 98US-099803P. 14-SEP-1998;
 98US-100262P. 17-SEP-1998; 98US-100858P. 13-OCT-1998;
 98US-104080P. 20-NOV-1998; 98US-109304P. 22-DEC-1998;
 98US-113296P. 07-JUL-1999; 99US-143048P. 26-JUL-1999;
 99US-145698P. 28-JUL-1999; 99US-146222P. 18-SEP-2000;
 2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-417249/39. P-PSDB; ABO14823; Patent Format: Claim 2; Fig
 41; 467pp; English.

COMMENT

The invention relates to an isolated secreted and transmembrane PRO polypeptide. The PRO polypeptides are useful for modulating biological activity of a cell; in diagnosing or treating abnormal bleeding involved in gynaecological diseases e.g. to avoid or lessen the need for hysterectomy, for treating angiogenesis, tumour, coronary ischaemic condition, disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's disease, amyotrophic lateral sclerosis (ALS), neuropathies, disease related to uncontrolled cell growth (e.g. cancer), blood coagulation cascade disorders, neurodegenerative disease, thrombosis, haemorrhage, endometrial bleeding, wound healing, tissue repair, asthma, rheumatoid arthritis, multiple sclerosis. Nucleic acid encoding PRO polypeptides are useful in molecular biology including uses as hybridisation probes and in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals. The PRO polypeptides and their nucleic acids are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO

antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The present sequence represents cDNA encoding a human secreted and transmembrane PRO polypeptide.

FEATURES Location/Qualifiers
 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

P_ACA54901 Novel human secreted and transmembrane protein PRO317 cDNA. 616 bp, cDNA, PAT 05-JUN-2003

ACCESSION P_ACA54901

KEYWORDS Human; secreted and transmembrane protein; gene therapy; psoriasis; enterocolitis; gastrointestinal ulceration; skin disease; keratinocyte differentiation; epithelial cancer; Alzheimer's disease; squamous cell carcinoma; Parkinson's disease; inflammatory disease; amyotrophic lateral sclerosis; rheumatoid arthritis; asthma; multiple sclerosis; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; AIDS; cancer; diabetic complication; wound repair; tissue re-growth; gene; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N. Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E., Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L., Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F., Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease -

JOURNAL Patent: US2003017463-A1; Filing Date: 11-JUL-2001; 2001US-0903640;

Publication Date: 23-JAN-2003; Priority: 10-SEP-1998;

98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
 98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
 98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
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 99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
 99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;
 99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
 99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
 99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
 2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
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 2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
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 97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
 97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
 97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;
 97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
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 98US-088026P. 10-SEP-1998; 98US-099803P. 14-SEP-1998;
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 98US-104080P. 20-NOV-1998; 98US-109304P. 22-DEC-1998;
 98US-113296P. 07-JUL-1999; 99US-143048P. 26-JUL-1999;
 99US-145698P. 28-JUL-1999; 99US-146222P. 18-SEP-2000;

2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-341586/32. P-PSDB; ABU69641; Patent Format: Claim 2; Fig
 41; 473pp; English.

COMMENT

The invention describes sixty one nucleic acids encoding PRO
 polypeptides (secreted and transmembrane). The PRO polypeptides and
 nucleic acids are useful in diagnosing or treating enterocolitis,
 gastrointestinal ulceration, skin diseases associated with abnormal
 keratinocyte differentiation, e.g. psoriasis or epithelial cancers
 such as squamous cell carcinoma, Alzheimer's disease, Parkinson's
 disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g.
 rheumatoid arthritis, asthma or multiple sclerosis, organ failure,
 atherosclerosis, cardiac injury, infertility, birth defects,
 premature aging, AIDS, cancer, diabetic complications, or mutations
 in general. The polypeptides are also useful for wound repair and
 associated therapies concerned with re-growth of tissue. The PRO
 polypeptides and nucleic acid molecules are also useful in gene
 therapy, and as molecular weight markers for protein electrophoresis
 purposes. The anti-PRO antibodies may be used in diagnostic assays
 for PRO, or for the affinity purification of PRO from recombinant
 cell culture or natural sources. This sequence encodes a novel human
 PRO polypeptide.

FEATURES

Location/Qualifiers

BASE COUNT 294 a 497 c 506 g 318 t 1 others

ORIGIN

P_ACD07493 Novel human secreted and transmembrane protein PRO317 cDNA. 616 bp,
 cDNA, PAT 07-AUG-2003

ACCESSION P_ACD07493

KEYWORDS Human; secreted and transmembrane protein; PRO; pharmaceutical;
 diagnostic; biosensor; bioreactor; Parkinson's disease; Alzheimer's
 disease; inflammation; nephritis; wound healing; nerve repair;
 collateral blood vessel formation; cancer; colorectal cancer;
 haemorrhage; rheumatoid arthritis; diabetes; cirrhosis; fibrosis;
 restenosis; dermal fibrotic condition; keloid; scarring; ischaemia;

stroke; hypertension; heart attack; atherosclerosis; infertility;
gene therapy; gene; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.
Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E.,
Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L.,
Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F.,
Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE New genes and secreted and transmembrane polypeptides (e.g. PRO245
or PRO335), useful for treating or diagnosing e.g. Alzheimer's
disease, cancers, hemorrhage, rheumatoid arthritis, diabetes,
cirrhosis, ischemia or strokes -

JOURNAL Patent: US2002197671-A1; Filing Date: 17-JUL-2001; 2001US-0907824;
Publication Date: 26-DEC-2002; Priority: 10-SEP-1998;

98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998;
98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998;
98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
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2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
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2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
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97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
97US-066770P. 24-NOV-1997; 97US-066772P. 18-SEP-2000;
2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
WPI; 2003-370793/35. P-PSDB; ABO01793; Patent Format: Claim 2; Fig

41; 482pp; English.

COMMENT The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American Type Culture Collection (e.g. ATCC Deposit No. 209258) ,or a sequence with at least 80% identity to a DNA encoding a PRO polypeptide comprising any of 61 sequences having 164-1119 amino acids fully defined in the specification. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating e.g. Parkinson's disease, Alzheimer's disease, inflammations, nephritis, wound healing, nerve repair, collateral blood vessel formation, cancers (e.g. colorectal cancer), haemorrhage (or reduce risk for haemorrhage), rheumatoid arthritis, diabetes, cirrhosis of the liver, fibrosis of the lungs, restenosis, dermal fibrotic conditions (e.g. keloids or scarring), ischaemia, strokes, hypertension, heart attacks, atherosclerosis, or infertility in mammals (e.g. humans, dogs, cats, cattle, horses, sheep, pigs, goats, or rabbits) The PRO polypeptides are useful as targets for therapeutic intervention in these diseases, and diagnostic determination of the presence of these diseases. The PRO polypeptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. This sequence encodes a novel human secreted and transmembrane PRO polypeptide.

FEATURES Location/Qualifiers
BASE COUNT 294 a 497 c 506 g 318 t 1 others
ORIGIN

P_ACD23584 Human PRO polynucleotide #20. 616 bp, cDNA, PAT.26-AUG-2003

ACCESSION P_ACD23584

KEYWORDS Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; leukocyte homing; rheumatoid arthritis; psoriasis; multiple sclerosis; mucosal lesion; enterocolitis Zollinger Ellison syndrome; asthma; antiasthmatic; antirheumatic; antiarthritic; neuroprotective; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N. Filvaroff,E., Fong,S., Gao,W., Gerber,H., Gerritsen,M.E., Goddard,A. Godowski,P.J., Grimaldi,J.C., Gurney,A.L., Hillan,K.J., Kljavin,I.J. Mather,J.P., Pan,J., Paoni,N.F., Roy,M.A., Stewart,T.A., Tumas,D. Williams,P.M., Wood,W.I.

TITLE Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers -

JOURNAL Patent: US2003064923-A1; Filing Date: 13-JUL-2001; 2001US-0905348; Publication Date: 03-APR-2003; Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177. 16-SEP-1998; 98WO-US19330. 17-SEP-1998; 98WO-US19437. 01-DEC-1998; 98WO-US25108. 08-SEP-1999; 99WO-US20594. 13-SEP-1999; 99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999; 99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999; 99WO-US28214. 30-NOV-1999; 99WO-US28313. 01-DEC-1999;

99WO-US28301. 02-DEC-1999; 99WO-US28564. 02-DEC-1999;
 99WO-US28565. 16-DEC-1999; 99WO-US30095. 20-DEC-1999;
 99WO-US30911. 20-DEC-1999; 99WO-US30999. 05-JAN-2000;
 2000WO-US00219. 11-FEB-2000; 2000WO-US03565. 22-FEB-2000;
 2000WO-US04414. 24-FEB-2000; 2000WO-US05004. 02-MAR-2000;
 2000WO-US05841. 20-MAR-2000; 2000WO-US07377. 30-MAR-2000;
 2000WO-US08439. 22-MAY-2000; 2000WO-US14042. 02-JUN-2000;
 2000WO-US15264. 28-JUL-2000; 2000WO-US20710. 24-AUG-2000;
 2000WO-US23328. 17-SEP-1997; 97US-059113P. 17-SEP-1997;
 97US-059115P. 17-SEP-1997; 97US-059117P. 17-SEP-1997;
 97US-059119P. 17-SEP-1997; 97US-059121P. 17-SEP-1997;
 97US-059122P. 17-SEP-1997; 97US-059184P. 18-SEP-1997;
 97US-059263P. 18-SEP-1997; 97US-059266P. 15-OCT-1997;
 97US-062125P. 17-OCT-1997; 97US-062285P. 17-OCT-1997;
 97US-062287P. 21-OCT-1997; 97US-063486P. 24-OCT-1997;
 97US-062814P. 24-OCT-1997; 97US-062816P. 24-OCT-1997;
 97US-063045P. 24-OCT-1997; 97US-063120P. 24-OCT-1997;
 97US-063121P. 24-OCT-1997; 97US-063127P. 24-OCT-1997;
 97US-063128P. 27-OCT-1997; 97US-063327P. 27-OCT-1997;
 97US-063329P. 28-OCT-1997; 97US-063541P. 28-OCT-1997;
 97US-063542P. 28-OCT-1997; 97US-063544P. 28-OCT-1997;
 97US-063549P. 28-OCT-1997; 97US-063550P. 28-OCT-1997;
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 97US-063704P. 29-OCT-1997; 97US-063732P. 29-OCT-1997;
 97US-063734P. 29-OCT-1997; 97US-063735P. 29-OCT-1997;
 97US-063738P. 29-OCT-1997; 97US-064215P. 31-OCT-1997;
 97US-063870P. 31-OCT-1997; 97US-064103P. 03-NOV-1997;
 97US-064248P. 07-NOV-1997; 97US-064809P. 12-NOV-1997;
 97US-065186P. 17-NOV-1997; 97US-065846P. 18-NOV-1997;
 97US-065693P. 21-NOV-1997; 97US-066120P. 21-NOV-1997;
 97US-066364P. 24-NOV-1997; 97US-066453P. 24-NOV-1997;
 97US-066466P. 24-NOV-1997; 97US-066511P. 24-NOV-1997;
 97US-066770P. 24-NOV-1997; 97US-066772P. 25-NOV-1997;
 97US-066840P. 12-DEC-1997; 97US-069425P. 04-JUN-1998;
 98US-088026P. 10-SEP-1998; 98US-099803P. 14-SEP-1998;
 98US-100262P. 17-SEP-1998; 98US-100858P. 13-OCT-1998;
 98US-104080P. 20-NOV-1998; 98US-109304P. 22-DEC-1998;
 98US-113296P. 07-JUL-1999; 99US-143048P. 26-JUL-1999;
 99US-145698P. 28-JUL-1999; 99US-146222P. 18-SEP-2000;
 2000US-0665350; Assignee: (GETH) GENENTECH INC; Cross Reference:
 WPI; 2003-567190/53. P-PSDB; ABO17574; Patent Format: Claim 2; Fig
 41; 471pp; English.

COMMENT

The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The polypeptides are useful for detecting PRO polypeptides and for linking a bioactive molecule to a cell expressing the polypeptides, where the bioactive molecule is a toxin, radiolabel or an antibody. The bioactive material causes the death of the cell. The polypeptides or antibodies specific to the polypeptides are useful for modulating at least one biological activity of a cell expressing the polypeptides. The polypeptides are useful for treating disorders associated with leukocyte homing such as asthma, rheumatoid arthritis, psoriasis and multiple sclerosis, repair of acute and chronic mucosal lesions such as enterocolitis and Zollinger Ellison syndrome and for identifying agonists or antagonists of the polypeptides. The polynucleotides are useful as hybridization probes, in chromosome and gene mapping, in generation of antisense

RNA and DNA, in the preparation of PRO polypeptides and for generating probes for polymerase chain reaction (PCR), Northern analysis, Southern analysis and Western analysis. This sequence represents a human PRO polynucleotide of the invention.

FEATURES Location/Qualifiers

BASE COUNT 294 a 497 c 506 g 318 t 1 others

ORIGIN

AY358873 Homo sapiens clone DNA33461 LEFTB (UNQ278) mRNA, complete cds.
1616 bp, mRNA, linear, PRI 03-OCT-2003

ACCESSION AY358873

VERSION AY358873.1 GI:37182863

KEYWORDS FLI_CDNA.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Clark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J.,
Chen, J., Chow, B., Chui, C., Crowley, C., Currell, B., Deuel, B.,
Dowd, P., Eaton, D., Foster, J., Grimaldi, C., Gu, Q., Hass, P.E.,
Heldens, S., Huang, A., Kim, H.S., Klimowski, L., Jin, Y., Johnson, S.,
Lee, J., Lewis, L., Liao, D., Mark, M., Robbie, E., Sanchez, C.,
Schoenfeld, J., Seshagiri, S., Simmons, L., Singh, J., Smith, V.,
Stinson, J., Vagts, A., Vandlen, R., Watanabe, C., Wieand, D., Woods, K.,
Xie, M.H., Yansura, D., Yi, S., Yu, G., Yuan, J., Zhang, M., Zhang, Z.,
Goddard, A., Wood, W.I. and Godowski, P.

TITLE The Secreted Protein Discovery Initiative (SPDI), a Large-Scale
Effort to Identify Novel Human Secreted and Transmembrane Proteins:
A Bioinformatics Assessment

JOURNAL Genome Res. 13 (10), 2265-2270 (2003)

PUBMED 12975309

REFERENCE 2 (bases 1 to 1616)

AUTHORS Clark, H.F.

TITLE Direct Submission

JOURNAL Submitted (01-AUG-2003) Department of Bioinformatics, Genentech,
Inc., 1 DNA Way, South San Francisco, CA 94080, USA

FEATURES Location/Qualifiers

source 1..1616
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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CDS 68..1168
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/db_xref="GI:37182864"

BASE COUNT 294 a 497 c 506 g 318 t 1 others

ORIGIN

AX076929 Sequence 41 from Patent WO0105836. 1616 bp,
DNA, linear, PAT 22-FEB-2001

ACCESSION AX076929
 VERSION AX076929.1 GI:13121583
 KEYWORDS
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1
 AUTHORS Botstein,D., Goddard,A., Gurney,A.L., Hillan,K.J., Roy,M.A. and
 Wood,W.I.
 TITLE Polypeptidic compositions and methods for the treatment of tumors
 JOURNAL Patent: WO 0105836-A 41 25-JAN-2001;
 Genentech, Inc. (US)
 FEATURES Location/Qualifiers
 source 1..1616
 /organism="Homo sapiens"
 /mol_type="unassigned DNA"
 /db_xref="taxon:9606"
 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

AX697522 Sequence 113 from Patent WO0104311. 1616 bp,
 DNA, linear, PAT 02-APR-2003

ACCESSION AX697522
 VERSION AX697522.1 GI:29498634
 KEYWORDS
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1
 AUTHORS Ashkenazi,A.J., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.,
 Filvaroff,E., Fong,S., Gao,W.Q., Gerber,H., Gerritsen,M.E.,
 Goddard,A., Godowski,P.J., Grimaldi,C.J., Gurney,A.L., Hillan,K.J.,
 Kljavin,I.J., Mather,J.P., Pan,J., Paoni,N.F., Roy,M.A.,
 Stewart,T.A., Tumas,D., Williams,P.M. and Wood,W.I.
 TITLE Secreted and transmembrane polypeptides and nucleic acids encoding
 the same
 JOURNAL Patent: WO 0104311-A 113 18-JAN-2001;
 Genentech Inc. (US)
 FEATURES Location/Qualifiers
 source 1..1616
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 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

BD075461 Secretory and transmembrane polypeptide and nucleic acid encoding
 the same. 1616 bp, DNA, linear, PAT 27-AUG-2002

ACCESSION BD075461
 VERSION BD075461.1 GI:22621064
 KEYWORDS JP 2001516580-A/94.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1616)
 AUTHORS Wood,W.I., Gurney,A.L., Goddard,A., Penica,D., Chen,J. and Yuan,J.
 TITLE Secretory and transmembrane polypeptide and nucleic acid encoding
 the same
 JOURNAL Patent: JP 2001516580-A 94 02-OCT-2001;
 GENENTECH INC
 COMMENT OS Homo sapiens (human)
 PN JP 2001516580-A/94
 PD 02-OCT-2001
 PF 16-SEP-1998 JP 2000511867
 PR 17-SEP-1997 US 60/059115,17-SEP-1997 US 60/059184 PR
 17-SEP-1997 US 60/059122,17-SEP-1997 US 60/059117 PR
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 28-OCT-1997 US 60/063544,28-OCT-1997 US 60/063564 PR
 29-OCT-1997 US 60/063734,29-OCT-1997 US 60/063738 PR
 29-OCT-1997 US 60/063704,29-OCT-1997 US 60/063435 PR
 29-OCT-1997 US 60/064215,29-OCT-1997 US 60/063735 PR
 29-OCT-1997 US 60/064103,31-OCT-1997 US 60/063870 PR
 03-NOV-1997 US 60/064248,07-NOV-1997 US 60/064809 PR
 12-NOV-1997 US 60/065186,17-NOV-1997 US 60/065846 PR
 18-NOV-1997 US 60/065693,21-NOV-1997 US 60/066120 PR
 21-NOV-1997 US 60/066364,24-NOV-1997 US 60/066772 PR
 24-NOV-1997 US 60/066466,24-NOV-1997 US 60/066770 PR
 24-NOV-1997 US 60/066511,24-NOV-1997 US 60/066453 PR
 25-NOV-1997 US 60/066840
 PI WILLIAM I WOOD,AUSTIN L GURNEY,AUDLEY GODDARD,DIANE PENICA, PI
 JEAN CHEN,
 PI JEAN YUAN
 PC C12N15/09,C07K14/47,C07K14/705,C07K16/18,C07K16/28,C07K19/00,
 PC C12N1/19,
 PC C12N1/21,C12N5/10,C12P21/02,C12P21/08,C12Q1/02//(C12P21/08, PC
 C12R1:91),
 PC C12N15/00,C12N5/00
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 encoding the same
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 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN
 BD172321 Secreted and transmembrane polypeptides and nucleic acids encoding

the same. 1616 bp, DNA, linear, PAT 18-FEB-2003

ACCESSION BD172321

VERSION BD172321.1 GI:28413621

KEYWORDS JP 2002223786-A/94.

SOURCE Homo sapiens (human).

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Wood,W.I., Gurney,A.L., Goddard,A., Pennica,D., Zheng,J. and
Yuan,J.

TITLE Secreted and transmembrane polypeptides and nucleic acids encoding
the same

JOURNAL Patent: JP 2002223786-A 94 13-AUG-2002;
GENENTECH INC

COMMENT OS Homo sapiens (human)

PN JP 2002223786-A/94

PD 13-AUG-2002

PF 18-DEC-2001 JP 2001385135

PR 17-SEP-1997 US 60/059115,17-SEP-1997 US 60/059184 PR

17-SEP-1997 US 60/059122,17-SEP-1997 US 60/059117 PR

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29-OCT-1997 US 60/063732,31-OCT-1997 US 60/064103 PR

31-OCT-1997 US 60/063870,03-NOV-1997 US 60/064248 PR

07-NOV-1997 US 60/064809,12-NOV-1997 US 60/065186 PR

17-NOV-1997 US 60/065846,18-NOV-1997 US 60/065693 PR

21-NOV-1997 US 60/066120,21-NOV-1997 US 60/066364 PR

24-NOV-1997 US 60/066772,24-NOV-1997 US 60/066466 PR

24-NOV-1997 US 60/066770,24-NOV-1997 US 60/066511 PR

24-NOV-1997 US 60/066453,25-NOV-1997 US 60/066840 PI

WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI

JIAN ZHENG,

PI JEAN YUAN

PC C12N15/09,C07K14/47,C07K16/18,C07K19/00,C12N1/19,C12N1/21, PC
C12N5/10,

PC

C12P21/02//C12P21/08,(C12P21/02,C12R1:19),(C12P21/02,C12R1:91), PC
(C12P21/02,C12R1:645),C12N15/00,C12N5/00

CC Secreted and transmembrane polypeptides and nucleic CC acids
encoding the same

FH Key Location/Qualifiers

FT source 1..1616

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FEATURES Location/Qualifiers
 source 1..1616
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 BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

BD172640 Secreted and transmembrane polypeptides and nucleic acids encoding
 the same. 1616 bp, DNA, linear, PAT 18-FEB-2003

ACCESSION BD172640
 VERSION BD172640.1. GI:28413942
 KEYWORDS JP 2002238586-A/94.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens

 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1616)
 AUTHORS Wood,W.I., Gurney,A.L., Goddard,A., Pennica,D., Zheng,J. and
 Yuan,J.

TITLE Secreted and transmembrane polypeptides and nucleic acids encoding
 the same

JOURNAL Patent: JP 2002238586-A 94 27-AUG-2002;
 GENENTECH INC

COMMENT OS Homo sapiens (human)

PN JP 2002238586-A/94
 PD 27-AUG-2002
 PF 18-DEC-2001 JP 2001385205
 PR 17-SEP-1997 US 60/059115,17-SEP-1997 US 60/059184 PR
 17-SEP-1997 US 60/059122,17-SEP-1997 US 60/059117 PR
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 17-SEP-1997 US 60/059119,18-SEP-1997 US 60/059263 PR
 18-SEP-1997 US 60/059266,15-OCT-1997 US 60/062125 PR
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 31-OCT-1997 US 60/063870,03-NOV-1997 US 60/064248 PR
 07-NOV-1997 US 60/064809,12-NOV-1997 US 60/065186 PR
 17-NOV-1997 US 60/065846,18-NOV-1997 US 60/065693 PR
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 24-NOV-1997 US 60/066770,24-NOV-1997 US 60/066511 PR
 24-NOV-1997 US 60/066453,25-NOV-1997 US 60/066840 PI
 WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI
 JIAN ZHENG,
 PI JEAN YUAN
 PC C12N15/09,C07K14/47,C07K16/18,C07K19/00,C12N1/19,C12N1/21, PC

C12N5/10,
 PC C12P21/02//C12P21/08, (C12N1/19, C12R1:645), (C12N1/21, C12R1:19),
 PC
 (C12N5/10, C12R1:91), (C12P21/02, C12R1:91), (C12P21/02, C12R1:645), PC
 (C12P21/02, C12R1:19), (C12P21/08, C12R1:91), C12N15/00, C12N5/00, PC
 (C12N5/00, C12R1:91)
 CC Secreted and transmembrane polypeptides and nucleic CC acids
 encoding the same
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 FT source 1..1616
 FT /organism='Homo sapiens (human)'.

FEATURES Location/Qualifiers
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BASE COUNT 294 a 497 c 506 g 318 t 1 others
 ORIGIN

BD172959 Secreted and transmembrane polypeptides and nucleic acids encoding
 the same. 1616 bp, DNA, linear, PAT 18-FEB-2003

ACCESSION BD172959
 VERSION BD172959.1 GI:28414265
 KEYWORDS JP 2002238587-A/94.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1616)
 AUTHORS Wood, W.I., Gurney, A.L., Goddard, A., Pennica, D., Zheng, J. and
 Yuan, J.
 TITLE Secreted and transmembrane polypeptides and nucleic acids encoding
 the same
 JOURNAL Patent: JP 2002238587-A 94 27-AUG-2002;
 GENENTECH INC

COMMENT OS Homo sapiens (human)
 PN JP 2002238587-A/94
 PD 27-AUG-2002
 PF 18-DEC-2001 JP 2001385248
 PR 17-SEP-1997 US 60/059115, 17-SEP-1997 US 60/059184 PR
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 17-SEP-1997 US 60/059119, 18-SEP-1997 US 60/059263 PR
 18-SEP-1997 US 60/059266, 15-OCT-1997 US 60/062125 PR
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31-OCT-1997 US 60/063870, 03-NOV-1997 US 60/064248 PR
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 24-NOV-1997 US 60/066770, 24-NOV-1997 US 60/066511 PR
 24-NOV-1997 US 60/066453, 25-NOV-1997 US 60/066840 PI
 WILLIAM I WOOD, AUSTIN L GURNEY, AUDREY GODDARD, DIANE PENNICA, PI
 JIAN ZHENG,
 PI JEAN YUAN
 PC C12N15/09, C07K14/47, C07K16/18, C12N1/19, C12N1/21, C12N5/10, PC
 C12N15/02,
 PC
 C12P21/02, C12P21/08// (C12P21/02, C12R1:91), (C12P21/02, C12R1:19), PC
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 BD173278 Secreted and transmembrane polypeptides and nucleic acids encoding
 the same. 1616 bp, DNA, linear, PAT 18-FEB-2003
 ACCESSION BD173278
 VERSION BD173278.1 GI:28414589
 KEYWORDS JP 2002238588-A/94.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 1616)
 AUTHORS Wood, W.I., Gurney, A.L., Goddard, A., Pennica, D., Zheng, J. and
 Yuan, J.
 TITLE Secreted and transmembrane polypeptides and nucleic acids encoding
 the same
 JOURNAL Patent: JP 2002238588-A 94.27-AUG-2002;
 GENENTECH INC
 COMMENT OS Homo sapiens (human)
 PN JP 2002238588-A/94
 PD 27-AUG-2002
 PF 18-DEC-2001 JP 2001385315
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 17-NOV-1997 US 60/065846, 18-NOV-1997 US 60/065693 PR
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 WILLIAM I WOOD, AUSTIN L GURNEY, AUDREY GODDARD, DIANE PENNICA, PI
 JIAN ZHENG,
 PI JEAN YUAN
 PC C12N15/09, C07K14/435, C07K16/18, C07K19/00, C12N1/19, C12N1/21, PC
 C12N5/10,
 PC C12P21/02//C12P21/08, (C12N1/19, C12R1:645), (C12N1/21, C12R1:19),
 PC (C12N5/10, C12R1:91), C12N15/00, C12N5/00, (C12N5/00, C12R1:91) CC
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 source 1..1616
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 BASE COUNT 294 a 497 c 506 g 318 t 1 others
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 BD175312 Secretory and transmembrane polypeptide and nucleic acid encoding
 the same. 1616 bp, DNA, linear, PAT 18-MAR-2003
 ACCESSION BD175312
 VERSION BD175312.1 GI:29121008
 KEYWORDS JP 2002253280-A/94.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 1616)
 AUTHORS Wood, W.I., Gurney, A.L., Goddard, A., Pennica, D., Zheng, J. and
 Yuan, J.
 TITLE Secretory and transmembrane polypeptide and nucleic acid encoding
 the same
 JOURNAL Patent: JP 2002253280-A 94 10-SEP-2002;
 GENENTECH INC
 COMMENT OS Homo sapiens (human)
 PN JP 2002253280-A/94
 PD 10-SEP-2002
 PF 18-DEC-2001 JP 2001385319
 PR 17-SEP-1997 US 60/059115, 17-SEP-1997 US 60/059184 PR

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17-SEP-1997	US	60/059113,17-SEP-1997	US	60/059121	PR
17-SEP-1997	US	60/059119,18-SEP-1997	US	60/059263	PR
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27-OCT-1997	US	60/063329,27-OCT-1997	US	60/063327	PR
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29-OCT-1997	US	60/063734,29-OCT-1997	US	60/063738	PR
29-OCT-1997	US	60/063704,29-OCT-1997	US	60/063435	PR
29-OCT-1997	US	60/064215,29-OCT-1997	US	60/063735	PR
29-OCT-1997	US	60/063732,31-OCT-1997	US	60/064103	PR
31-OCT-1997	US	60/063870,03-NOV-1997	US	60/064248	PR
07-NOV-1997	US	60/064809,12-NOV-1997	US	60/065186	PR
17-NOV-1997	US	60/065846,18-NOV-1997	US	60/065693	PR
21-NOV-1997	US	60/066120,21-NOV-1997	US	60/066364	PR
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24-NOV-1997	US	60/066770,24-NOV-1997	US	60/066511	PR
24-NOV-1997	US	60/066453,25-NOV-1997	US	60/066840	PI
WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI					
JIAN ZHENG,					
PI JEAN YUAN					
PC C12N15/09,A61K45/00,A61P1/00,A61P13/12,A61P17/00,A61P17/06, PC					
A61P25/00,					
PC A61P25/16,A61P25/28,A61P31/12,A61P35/00,C07K14/47,C07K16/18,					
PC C07K19/00,					
PC C12N1/19,C12N1/21,C12N5/10//A61K38/00,A61K39/395,A61K39/395;					
PC A61P43/00,					
PC C12P21/08,(C12N1/19,C12R1:645),(C12N1/21,C12R1:19),(C12N5/10,					
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PC C12N15/00,C12N5/00,A61K37/02,(C12N5/00,C12R1:91) CC					
Secretory and transmembrane polypeptide and nucleic acid CC					
encoding the same					
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BASE COUNT 294 a 497 c 506 g 318 t 1 others					
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NM_020997 Homo sapiens left-right determination, factor B (LEFTB), mRNA.					
1647 bp, mRNA, linear, PRI 06-SEP-2003					
ACCESSION NM_020997					
VERSION NM_020997.2 GI:27436943					
KEYWORDS					
SOURCE Homo sapiens (human)					
ORGANISM Homo sapiens					
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;					

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1647)
AUTHORS Yashiro,K., Saijoh,Y., Sakuma,R., Tada,M., Tomita,N., Amano,K.,
Matsuda,Y., Monden,M., Okada,S. and Hamada,H.
TITLE Distinct transcriptional regulation and phylogenetic divergence of
human LEFTY genes
JOURNAL Genes Cells 5 (5), 343-357 (2000)
MEDLINE 20345604
PUBMED 10886363
REMARK This paper refers to LEFTB as LEFTY1.
REFERENCE 2 (bases 1 to 1647)
AUTHORS Kosaki,K., Bassi,M.T., Kosaki,R., Lewin,M., Belmont,J., Schauer,G.
and Casey,B.
TITLE Characterization and mutation analysis of human LEFTY A and LEFTY
B, homologues of murine genes implicated in left-right axis
development
JOURNAL Am. J. Hum. Genet. 64 (3), 712-721 (1999)
MEDLINE 99162193
PUBMED 10053005
COMMENT REVIEWED REFSEQ: This record has been curated by NCBI staff. The
reference sequence was derived from AF081512.1 and BC027883.1.
On Dec 31, 2002 this sequence version replaced gi:10337602.

Summary: This gene encodes a member of the TGF-beta family of
proteins. A similar secreted protein in mouse plays a role in
left-right asymmetry determination of organ systems during
development. Alternative processing of this protein can yield three
different products. This gene is closely linked to both a related
family member and a related pseudogene.
COMPLETENESS: complete on the 3' end.

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/db_xref="taxon:9606"
/chromosome="1"
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/note="synonyms: LEFTY1, LEFTY2, LEFTYB"
/db_xref="LocusID:10637"
/db_xref="MIM:603037"
CDS 71..1171
/gene="LEFTB"
/note="go_function: transforming growth factor-beta
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go_process: TGFbeta-receptor signaling pathway [goid
0007179] [evidence TAS] [pmid 10053005];
go_process: development [goid 0007275] [evidence IEA];
go_process: cell growth [goid 0016049] [evidence IEA]"
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 / gene="LEFTB"
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BC027883 Homo sapiens, left-right determination, factor B, clone MGC:34249
 IMAGE:5221120, mRNA, complete cds. 1644 bp,
 mRNA, linear, PRI 01-MAY-2002
 ACCESSION BC027883
 VERSION BC027883.1 GI:20379728
 KEYWORDS MGC.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 1644)

AUTHORS Strausberg,R.
 TITLE Direct Submission
 JOURNAL Submitted (08-APR-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA
 REMARK NIH-MGC Project URL: <http://mgc.nci.nih.gov>
 COMMENT Contact: MGC help desk
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Life Technologies, Inc.
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: National Institutes of Health Intramural Sequencing Center (NISC), Gaithersburg, Maryland;
 Web site: <http://www.nisc.nih.gov/>
 Contact: nisc_mgc@nhgri.nih.gov
 Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B., Blakesley,R.W., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S., Dietrich,N.L., Granite,S., Guan,X., Gupta,J., Haghighi,P., Hansen,N., Ho,S.-L., Karlins,E., Laric,P., Legaspi,R., Maduro,Q.L., Masiello,C., Maskeri,B., Mastrian,S.D., McCloskey,J.C., McDowell,J., Pearson,R., Stantripop,S., Thomas,P.J., Touchman,J.W., Tsurgeon,C., Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L., Young,A., Zhang,L.-H. and Green,E.D.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
 Series: IRAK Plate: 49 Row: k Column: 2
 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 10337602.

FEATURES Location/Qualifiers
 source 1..1644
 /organism="Homo sapiens"
 /mol_type="mRNA"
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 /db_xref="taxon:9606"
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 /clone_lib="NIH_MGC_120"
 /lab_host="DH10B"
 /note="Vector: pCMV-SPORT6"
 CDS 68..1168
 /codon_start=1
 /product="left-right determination, factor B"
 /protein_id="AAH27883.1"
 /db_xref="GI:20379729"

BASE COUNT 223 a 496 c 506 g 319 t
 ORIGIN

P_AAD45128 Human Lefty cDNA. 688 bp, cDNA, PAT 27-DEC-2002

ACCESSION P_AAD45128

KEYWORDS Human; Nodal protein; Lefty protein; cell growth; cell differentiation; tumour; intestinal lung disease; cancer; arthritis; immunosuppression; autoimmunity; leukaemia; lymphoma; immunity; inflammatory bowel disease; myelosuppression; cytostatic; immunosuppressive; antiinflammatory; gene; patent; GENESEQ

patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1688)

AUTHORS Ebner,R., Soppet,D.R., Ruben,S.M.

TITLE Novel Nodal and Lefty polypeptides useful for diagnosing or treating cell growth and differentiation related disorders in humans, e.g. cancer, autoimmunity, arthritis and immunosuppression -

JOURNAL Patent: US2002086351-A1; Filing Date: 20-AUG-1998; 98US-0137415; Publication Date: 04-JUL-2002; Priority: 20-AUG-1998; 98US-0137415; Assignee: (EBNE/) EBNER R. (SOPP/) SOPPET D R. (RUBE/) RUBEN S M; Cross Reference: WPI; 2002-673479/72. P-PSDB; AAE28182; Patent Format: Claim 2; Page 49-51; 68pp; English.

COMMENT The present invention relates to novel Nodal and Lefty polypeptides and polynucleotides encoding such proteins. Sequences of the invention are useful for preventing, treating or ameliorating medical conditions. They are useful to diagnose or treat cell growth and differentiation related disorders in mammals, preferably humans such as tumour, intestinal lung disease, cancer and any dis-regulation of growth and differentiation pattern of cell function including autoimmunity, arthritis, leukaemia, lymphoma, immunosuppression, immunity, humoral immunity, inflammatory bowel disease or myelosuppression. The present sequence is human Lefty cDNA.

FEATURES Location/Qualifiers

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sig_peptide 53..106

/*tag= b

mat_peptide 107..1150

/*tag= c

/product= "Human mature Lefty protein"

BASE COUNT 315 a 514 c 525 g 334 t

ORIGIN

P_AAX31925 Human lefty protein encoding DNA. 688 bp, DNA, PAT 18-JUN-1999

ACCESSION P_AAX31925

KEYWORDS Nodal protein; lefty protein; TGF-beta; sexual development; human; bone; pituitary; cartilage; osteoarthritis; osteoporosis; haematopoiesis; periodontal disease; wound healing; tissue repair; tumour; cancer; interstitial lung disease; autoimmunity; leukaemia; lymphoma; immunity; immunosuppression; inflammatory bowel disease; myelosuppression; infectious disease; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1688)

AUTHORS Ebner,R., Ruben,S.M., Soppet,D.R.

TITLE New isolate human Nodal and Lefty polypeptides

JOURNAL Patent: WO9909198-A1; Filing Date: 20-AUG-1998; 98WO-US17211; Publication Date: 25-FEB-1999; Priority: 21-AUG-1997; 97US-0056565; Assignee: (HUMA-) HUMAN GENOME SCI INC; Cross Reference: WPI; 1999-190173/16. P-PSDB; AAY03850; Patent Format: Claim 2; Fig 1B; 182pp; English.

COMMENT The present invention relates to novel human nodal and lefty proteins which are members of the TGF-beta family. The human nodal and lefty proteins may be involved in a developmental process such

as the correct formation of various structures or in one or more post-developmental capacities including sexual development, pituitary hormone production, and the creation of bone and cartilage. The Nodal and Lefty polypeptides are useful for enhancing or enriching the growth and/or differentiation of specific cell populations, eg. embryonic cells or stem cells. They can be used to treat such conditions as osteoarthritis, osteoporosis, and other abnormalities of bone, cartilage, muscle, tendon, ligament, and/or other connective tissues and/or organs such as liver, lung, cardiac, pancreas, and kidney. Compositions containing nodal and lefty proteins may be useful for growth formation, for treating periodontal disease and for modulating haematopoiesis, wound healing and tissue repair. They can also be used for the treatment of tumours, cancers, interstitial lung disease, and any dysregulation of the growth and differentiation patterns of cell function including autoimmunity, arthritis, leukaemia, lymphomas, immunosuppression, immunity, humoral immunity, inflammatory bowel disease, myelosuppression, or infectious diseases. The present sequence represents a DNA encoding a human lefty polypeptide. The cDNA encoding the lefty protein is deposited under the ATCC deposit No. 209091.

FEATURES Location/Qualifiers
 CDS 53..1153
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 /product= "lefty protein"
 sig_peptide 53..106
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BASE COUNT 315 a 514 c 525 g 334 t
 ORIGIN

P_ABQ55009 Human ovarian antigen HUKJ46 cDNA, SEQ ID NO:889. 616 bp,
 cDNA, PAT 22-AUG-2002

ACCESSION P_ABQ55009

KEYWORDS Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
 ovarian cancer; breast cancer; tumour; reproductive system disorder;
 infertility; pregnancy disorder; anovulation; polycystic ovary
 syndrome; PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder;
 infection; inflammatory condition; immune disorder; blood disorder;
 cardiovascular disorder; respiratory disorder; neurological
 disorder; gastrointestinal disorder; urinary system disorder; drug
 screening; gene therapy; chromosome mapping; forensic analysis;
 antibody preparation; cytostatic; immunomodulatory; neuroprotective;
 antiinflammatory; gynaecological; reproductive; gene; patent;
 GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1616)

AUTHORS Birse,C.E., Rosen,C.A.

TITLE Isolated nucleic acid molecules encoding novel ovarian polypeptides,
 useful in the prevention, treatment and diagnosis of cancer (e.g.
 ovarian cancer), immune disorders, cardiovascular disorders and
 neurological diseases -

JOURNAL Patent: WO200200677-A1; Filing Date: 07-JUN-2001; 2001WO-US18569;
 Publication Date: 03-JAN-2002; Priority: 07-JUN-2000;
 2000US-209467P; Assignee: (HUMA-) HUMAN GENOME SCI INC; Cross

Reference: WPI; 2002-147878/19. P-PSDB; ABP41932; Patent Format:
Claim 1; SEQ ID No 889; 2922pp; English.

COMMENT

The invention relates to 2175 novel human ovarian antigens (ABP41054- ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also encompasses polypeptides 90% identical and polynucleotides 95% identical to the sequences of the invention. The invention additionally relates to recombinant vectors and host cells comprising human ovarian antigen polynucleotides, antibodies against human ovarian antigens, and the use of ovarian antigen polynucleotides and polypeptides in diagnosing, treating, prognosing or preventing various ovary and/or breast-related disorders. Such conditions include ovarian cancer and breast cancer, and metastatic tumours of ovarian or breast origin, reproductive system disorders (e.g., infertility, disorders of pregnancy, anovulation, polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and vaginitis), immune disorders (e.g., congenital and acquired immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus), blood-related disorders (e.g., anaemia), cardiovascular disorders, respiratory disorders, neurological disorders, gastrointestinal disorders and urinary system disorders. Ovarian antigen polypeptides and polynucleotides may also be used in screening for compounds which modulate ovarian antigen expression or activity. The polynucleotides may further be used for gene therapy, chromosome mapping, in the identification of individuals and in forensic analysis, and the polypeptides may be used as food additives or to prepare antibodies useful in disease diagnosis, drug targeting and phenotyping. The present sequence represents cDNA encoding a human ovarian antigen of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.

FEATURES

Location/Qualifiers

BASE COUNT	295 a	492 c	504 g	318 t	7 others
ORIGIN					

Thu Oct 9 15:40:44 2003 [BLASTP 2.2.6 [Apr-09-2003], NCBI]

/home/glinda/vf/Legal/byeung/pl.DNA33461 (366 aa)

/home/glinda/vf/Legal/byeung/pl.DNA33461

Database: day (3,982,273 seqs, 1,083,533,665 aa) Oct 6, 2003 7:49 AM

Locus list: hum (822,338 seqs, 172,698,043 aa)

Matrix: BLOSUM62, T: 11, A: 40, X1: 16, X2: 38, X3: 64, S1: 41, S2: 76, eval: 10.

Gap Penalties: Existence: 11, Extension: 1

Sequences producing High-scoring Segment Pairs:				Score	Match	Pct	E-val
1	P_ABU54366	Human secreted/transmembrane protein PRO317		1928	366	100	0.0
2	P_ABU64518	Human secreted/transmembrane protein, #22 -		1928	366	100	0.0
3	P_ABU67364	Human secreted protein PRO317 - Homo sapien		1928	366	100	0.0
4	P_ABU71910	Human secreted/transmembrane protein PRO317		1928	366	100	0.0
5	P_ABU71464	Human PRO polypeptide #20 - Homo sapiens.		1928	366	100	0.0
6	P_ABU69641	Novel human secreted and transmembrane prot		1928	366	100	0.0
7	P_ABU71609	Human PRO polypeptide #20 - Homo sapiens.		1928	366	100	0.0
8	P_ABO01793	Novel human secreted and transmembrane prot		1928	366	100	0.0
9	P_ABO14823	Human secreted / transmembrane polypeptide		1928	366	100	0.0
10	P_ABO17574	Human PRO polypeptide #20 - Homo sapiens.		1928	366	100	0.0
11	P_ABO17513	Human PRO polypeptide #20 - Homo sapiens.		1928	366	100	0.0
12	P_ABO14884	Human secreted / transmembrane polypeptide		1928	366	100	0.0
13	P_ABG96362	Human ovarian cancer marker M457 - Homo sap		1928	366	100	0.0
14	P_AAE28182	Human Lefty protein - Homo sapiens.		1928	366	100	0.0
15	P_AAB80231	Human PRO317 protein - Homo sapiens.		1928	366	100	0.0
16	P_AAB68600	PRO317 - Homo sapiens.		1928	366	100	0.0
17	P_AAY88575	Human PRO317 amino acid sequence - Homo sap		1928	366	100	0.0
18	P_AAY05287	EGF-like homologue EBAF-2 - Homo sapiens.		1928	366	100	0.0
19	P_AAY03850	Human lefty protein - Homo sapiens.		1928	366	100	0.0
20	P_AAY13363	protein PRO317 - Homo sapiens.		1928	366	100	0.0
21	AAD48144	TGF-beta type secreted signaling protein LE		1928	366	100	0.0
22	AAH27883	left-right determination, factor B /pid=AAH		1928	366	100	0.0
23	AAC33967	signaling molecule LEFTY-B /pid=AAC33967.1		1928	366	100	0.0
24	AAQ89232	LEFTB /pid=AAQ89232.1 - Homo sapiens		1928	366	100	0.0
25	NP_066277	left-right determination, factor B prepropr		1928	366	100	0.0
26	LFTB_HUMAN	Left-right determination factor b precursor		1928	366	100	0.0
27	P_AAY17870	Human bone morphogenic protein BMP-17 - Hom		1920	365	100	0.0
28	P_AAU79519	Human endometrial bleeding associated facto		1843	350	96	0.0
29	P_AAB19837	Endometrial bleeding associated factor (eba		1843	350	96	0.0
30	P_AAB95157	Human protein sequence SEQ ID NO:17194 - Ho		1843	350	96	0.0
31	P_AAY17871	Human bone morphogenic protein BMP-18 - Hom		1843	350	96	0.0
32	AAD48145	TGF-beta type secreted signaling protein LE		1843	350	96	0.0
33	AAH35718	Unknown (protein for MGC:46222) /pid=AAH357		1843	350	96	0.0
34	AAC32600	signaling molecule LEFTY-A /pid=AAC32600.1		1843	350	96	0.0
35	NP_003231	endometrial bleeding associated factor prep		1843	350	96	0.0
36	TGF4_HUMAN	Transforming growth factor beta 4 precursor		1843	350	96	0.0
37	BAC11556	unnamed protein product /pid=BAC11556.1 - H		1838	349	95	0.0
38	P_AAU79521	Human endometrial bleeding associated facto		1836	349	95	0.0
39	P_AAU79520	Human endometrial bleeding associated facto		1829	348	95	0.0
40	P_AAU77104	Human transforming growth factor beta 4 (TF		1755	337	92	0.0
41	P_AAY92013	Human transforming growth factor beta 4/eba		1755	337	92	0.0
42	AAB53269	endometrial bleeding associated factor /pid		1755	337	92	0.0
43	P_AAU91323	Human novel secreted protein LP105 - Homo s		1673	320	92	0.0
44	CAD29027	unnamed protein product /pid=CAD29027.1 - H		1673	320	92	0.0
45	P_ABP41932	Human ovarian antigen HUKJ46, SEQ ID NO:30		1204	224	98	e-130

>1 P_ABU54366 Human secreted/transmembrane protein PRO317 - Homo sapiens. (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABU54366    1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABU54366    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABU54366   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABU54366   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABU54366   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461    301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_ABU54366   301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461    361 PRRLQP
*****
P_ABU54366   361 PRRLQP
```

>2 P_ABU64518 Human secreted/transmembrane protein, #22 - Homo sapiens. (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABU64518    1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABU64518    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABU64518   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABU64518   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABU64518   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
```

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

 P_ABU64518 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

 P_ABU64518 361 PRRLQP

>3 P_ABU67364 Human secreted protein PRO317 - Homo sapiens. (366 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 P_ABU67364 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

 P_ABU67364 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

 P_ABU67364 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

 P_ABU67364 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

 P_ABU67364 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

 P_ABU67364 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

 P_ABU67364 361 PRRLQP

>4 P_ABU71910 Human secreted/transmembrane protein PRO317 - Homo sapiens. (366
 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 P_ABU71910 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

 P_ABU71910 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

 P_ABU71910 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRVFASQGAPAGLGEPQLELHTL

 P_ABU71910 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRVFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

 P_ABU71910 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

 P_ABU71910 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

 P_ABU71910 361 PRRLQP

>5 P_ABU71464 Human PRO polypeptide #20 - Homo sapiens. (366 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 P_ABU71464 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

 P_ABU71464 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

 P_ABU71464 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRVFASQGAPAGLGEPQLELHTL

 P_ABU71464 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRVFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

 P_ABU71464 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

 P_ABU71464 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

 P_ABU71464 361 PRRLQP

>6 P_ABU69641 Novel human secreted and transmembrane protein PRO317 - Homo (366 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 P_ABU69641 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

```

DNA33461    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABU69641  61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABU69641 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABU69641 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABU69641 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461   301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_ABU69641 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461   361 PRRLQP
*****
P_ABU69641 361 PRRLQP

```

>7 P_ABU71609 Human PRO polypeptide #20 - Homo sapiens. (366 aa) [1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```

DNA33461    1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABU71609  1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABU71609  61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABU71609 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABU71609 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABU71609 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461   301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_ABU71609 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461   361 PRRLQP
*****
P_ABU71609 361 PRRLQP

```

>8 P_ABO01793 Novel human secreted and transmembrane protein PRO317 - Homo (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABO01793    1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABO01793    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABO01793   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABO01793   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABO01793   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461    301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV
*****
P_ABO01793   301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

DNA33461    361 PRRLQP
*****
P_ABO01793   361 PRRLQP
```

>9 P_ABO14823 Human secreted / transmembrane polypeptide PRO317 - Homo (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABO14823    1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABO14823    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABO14823   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABO14823   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABO14823   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
```

```

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV
*****
P_ABO14823 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV

DNA33461 361 PRRLQP
*****
P_ABO14823 361 PRRLQP

```

>10 P_ABO17574 Human PRO polypeptide #20 - Homo sapiens. (366 aa) [1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABO17574 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABO17574 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABO17574 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABO17574 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABO17574 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV
*****
P_ABO17574 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV

DNA33461 361 PRRLQP
*****
P_ABO17574 361 PRRLQP

```

>11 P_ABO17513 Human PRO polypeptide #20 - Homo sapiens. (366 aa) [1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABO17513 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABO17513 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABO17513 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

```

```

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABO17513 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABO17513 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_ABO17513 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP
*****
P_ABO17513 361 PRRLQP

```

>12 P_ABO14884 Human secreted / transmembrane polypeptide PRO317 - Homo (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABO14884 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_ABO14884 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_ABO14884 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_ABO14884 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_ABO14884 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_ABO14884 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP
*****
P_ABO14884 361 PRRLQP

```

>13 P_ABG96362 Human ovarian cancer marker M457 - Homo sapiens. (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_ABG96362 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

```

DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

P_ABG96362	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

P_ABG96362	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

P_ABG96362	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

P_ABG96362	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
DNA33461	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

P_ABG96362	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
DNA33461	361	PRRLQP

P_ABG96362	361	PRRLQP

>14 P_AAE28182 Human Lefty protein - Homo sapiens. (366 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

P_AAE28182	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

P_AAE28182	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

P_AAE28182	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

P_AAE28182	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

P_AAE28182	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
DNA33461	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

P_AAE28182	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
DNA33461	361	PRRLQP

P_AAE28182	361	PRRLQP

>15 P_AAB80231 Human PRO317 protein - Homo sapiens. (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_AAB80231    1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_AAB80231    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAB80231   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAB80231   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_AAB80231   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461    301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV
*****
P_AAB80231   301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV

DNA33461    361 PRRLQP
*****
P_AAB80231   361 PRRLQP
```

>16 P_AAB68600 PRO317 - Homo sapiens. (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
P_AAB68600    1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
P_AAB68600    61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAB68600   121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAB68600   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_AAB68600   241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461    301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV
*****
```

P_AAB68600 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASD GALV

DNA33461 361 PRRLQP

P_AAB68600 361 PRRLQP

>17 P_AAY88575 Human PRO317 amino acid sequence - Homo sapiens. (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

P_AAY88575 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQS FREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

P_AAY88575 61 YVALLQRSHGDRSRGKRFSQS FREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

P_AAY88575 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

P_AAY88575 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

P_AAY88575 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASD GALV

P_AAY88575 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASD GALV

DNA33461 361 PRRLQP

P_AAY88575 361 PRRLQP

>18 P_AAY05287 EGF-like homologue EBAF-2 - Homo sapiens. (366 aa) [1 seg]

Score = 1928 (747 bits), Expect = 0.0

Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

P_AAY05287 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQS FREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

P_AAY05287 61 YVALLQRSHGDRSRGKRFSQS FREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

P_AAY05287 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

P_AAY05287 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

 P_AAY05287 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

 P_AAY05287 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

 P_AAY05287 361 PRRLQP

>19 P_AAY03850 Human lefty protein - Homo sapiens. (366 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 P_AAY03850 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

 P_AAY03850 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

 P_AAY03850 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

 P_AAY03850 181 TEAVNFWQQLSRPQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

 P_AAY03850 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

 P_AAY03850 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

 P_AAY03850 361 PRRLQP

>20 P_AAY13363 protein PRO317 - Homo sapiens. (366 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 P_AAY13363 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

 P_AAY13363 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

```

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAY13363 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAY13363 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
P_AAY13363 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGLV
*****
P_AAY13363 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGLV

DNA33461 361 PRRLQP
*****
P_AAY13363 361 PRRLQP

```

>21 AAD48144 TGF-beta type secreted signaling protein LEFTYB /pid=AAD48144.1 - Homo sapiens (366 aa) [1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*****
AAD48144 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
*****
AAD48144 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
AAD48144 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
AAD48144 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
*****
AAD48144 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGLV
*****
AAD48144 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGLV

DNA33461 361 PRRLQP
*****
AAD48144 361 PRRLQP

```

>22 AAH27883 left-right determination, factor.B /pid=AAH27883.1 - Homo sapiens (366 aa) [1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ *****
AAH27883	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL *****
AAH27883	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV *****
AAH27883	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL *****
AAH27883	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP *****
AAH27883	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
DNA33461	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV *****
AAH27883	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV
DNA33461	361	PRRLQP *****
AAH27883	361	PRRLQP

>23 AAC33967 signaling molecule LEFTY-B /pid=AAC33967.1 - Homo sapiens (366 aa)
[1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ *****
AAC33967	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL *****
AAC33967	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV *****
AAC33967	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL *****
AAC33967	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP *****
AAC33967	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
DNA33461	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV *****
AAC33967	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

AAC33967 361 PRRLQP

>24 AAQ89232 LEFTB /pid=AAQ89232.1 - Homo sapiens (366 aa) [1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

AAQ89232 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

AAQ89232 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

AAQ89232 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

AAQ89232 181 TEAVNFWQQLSRPQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

AAQ89232 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV

AAQ89232 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV

DNA33461 361 PRRLQP

AAQ89232 361 PRRLQP

>25 NP_066277 left-right determination, factor B preproprotein /pid=NP_066277.1
- Homo sapiens (366 aa) [1 seg]
Score = 1928 (747 bits), Expect = 0.0
Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

NP_066277 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

NP_066277 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

NP_066277 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

NP_066277 181 TEAVNFWQQLSRPQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

 NP_066277 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
 DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV

 NP_066277 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV
 DNA33461 361 PRRLQP

 NP_066277 361 PRRLQP

>26 LFTB_HUMAN Left-right determination factor b precursor /pid=AAC33967.1 -
 homo sapiens (366 aa) [1 seg]
 Score = 1928 (747 bits), Expect = 0.0
 Identities = 366/366 (100%), Positives = 366/366 (100%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 LFTB_HUMAN 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
 DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

 LFTB_HUMAN 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
 DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

 LFTB_HUMAN 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
 DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

 LFTB_HUMAN 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
 DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

 LFTB_HUMAN 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
 DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV

 LFTB_HUMAN 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALV
 DNA33461 361 PRRLQP

 LFTB_HUMAN 361 PRRLQP

>27 P_AAY17870 Human bone morphogenic protein BMP-17 - Homo sapiens. (366 aa) [1
 seg]
 Score = 1920 (744 bits), Expect = 0.0
 Identities = 365/366 (99%), Positives = 365/366 (99%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ

 P_AAY17870 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
 DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

P_AAY17870 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

P_AAY17870 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

P_AAY17870 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

P_AAY17870 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

P_AAY17870 301 PEALAFKWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

P_AAY17870 361 PRRLQP

>28 P_AAU79519 Human endometrial bleeding associated factor (ebaf) - Homo (366 aa) [1 seg]
Score = 1843 (714 bits), Expect = 0.0
Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* *****

P_AAU79519 1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLD RADMEKLVI PAHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
** ** *****

P_AAU79519 61 YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

P_AAU79519 121 FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

P_AAU79519 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
** *****

P_AAU79519 241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCQPP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

P_AAU79519 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461 361 PRRLQP

P_AAU79519 361 PRRLQP

>29 P_AAB19837 Endometrial bleeding associated factor (ebaf) protein - Homo (366 aa) [1 seg]

Score = 1843 (714 bits), Expect = 0.0
Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* ****
P_AAB19837    1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
** **
P_AAB19837    61 YVLLRRSHGDRSRGKRFSQSFRVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAB19837   121 FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAB19837   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
**
P_AAB19837   241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCQPP

DNA33461    301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV
*****
P_AAB19837   301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV

DNA33461    361 PRRLQP
*****
P_AAB19837   361 PRRLQP
```

>30 P_AAB95157 Human protein sequence SEQ ID NO:17194 - Homo sapiens.. (366 aa)
[1 seg]

Score = 1843 (714 bits), Expect = 0.0
Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

```
DNA33461      1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* ****
P_AAB95157    1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ

DNA33461     61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
** **
P_AAB95157    61 YVLLRRSHGDRSRGKRFSQSFRVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAB95157   121 FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAB95157   181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
**
P_AAB95157   241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCQPP

DNA33461    301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKSCASDGALV
```

```

*****
P_AAB95157 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGLV
DNA33461 361 PRRLQP
*****
P_AAB95157 361 PRRLQP

```

>31 P_AAY17871 Human bone morphogenic protein BMP-18 - Homo sapiens. (366 aa) [1 seg]

Score = 1843 (714 bits), Expect = 0.0

Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* *****
P_AAY17871 1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ
DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
** ** *****
P_AAY17871 61 YVLLRRSHGDRSRGKRFSQSFRVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAY17871 121 FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAY17871 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
** *****
P_AAY17871 241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP
DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGLV
*****
P_AAY17871 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGLV
DNA33461 361 PRRLQP
*****
P_AAY17871 361 PRRLQP

```

>32 AAD48145 TGF-beta type secreted signaling protein LEFTYA /pid=AAD48145.1 - Homo sapiens (366 aa) [1 seg]

Score = 1843 (714 bits), Expect = 0.0

Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* *****
AAD48145 1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ
DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
** ** *****
AAD48145 61 YVLLRRSHGDRSRGKRFSQSFRVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
AAD48145 121 FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

```

```

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
AAD48145 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
** *****
AAD48145 241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCQQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGLV
*****
AAD48145 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGLV

DNA33461 361 PRRLQP
*****
AAD48145 361 PRRLQP

```

>33 AAH35718 Unknown (protein for MGC:46222) /pid=AAH35718.1 - Homo sapiens (366 aa) [1 seg]

Score = 1843 (714 bits), Expect = 0.0

Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* *****
AAH35718 1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLD RADMEKLVI PAHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSEIVQAVLRL
** *
AAH35718 61 YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
AAH35718 121 FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
AAH35718 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
** *****
AAH35718 241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCQQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGLV
*****
AAH35718 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGLV

DNA33461 361 PRRLQP
*****
AAH35718 361 PRRLQP

```

>34 AAC32600 signaling molecule LEFTY-A /pid=AAC32600.1 - Homo sapiens (366 aa) [1 seg]

Score = 1843 (714 bits), Expect = 0.0

Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* *****
AAC32600 1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLD RADMEKLVI PAHVRAQ

```

DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
		** ** *
AAC32600	61	YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

AAC32600	121	FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

AAC32600	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
		** *****
AAC32600	241	DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP
DNA33461	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVS LPMNRVQKSCASDGALV

AAC32600	301	PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVS LPMNRVQKSCASDGALV
DNA33461	361	PRRLQP

AAC32600	361	PRRLQP

>35 NP_003231 endometrial bleeding associated factor preproprotein
 /pid=NP_003231.2 - Homo sapiens (366 aa) [1 seg]
 Score = 1843 (714 bits), Expect = 0.0
 Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

DNA33461	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
		* *****
NP_003231	1	MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVIPAHVRAQ
DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
		** ** *
NP_003231	61	YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

NP_003231	121	FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

NP_003231	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
		** *****
NP_003231	241	DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP
DNA33461	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVS LPMNRVQKSCASDGALV

NP_003231	301	PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVS LPMNRVQKSCASDGALV
DNA33461	361	PRRLQP

NP_003231	361	PRRLQP

>36 TGF4_HUMAN Transforming growth factor beta 4 precursor /pid=AAB53269.1 - homo sapiens (366 aa) [1 seg]
 Score = 1843 (714 bits), Expect = 0.0
 Identities = 350/366 (95%), Positives = 355/366 (96%), at 1,1-366,366

DNA33461	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ * *****
TGF4_HUMAN	1	MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ
DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL ** ** *****
TGF4_HUMAN	61	YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV *****
TGF4_HUMAN	121	FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL *****
TGF4_HUMAN	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP ** *****
TGF4_HUMAN	241	DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQP
DNA33461	301	PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVS LPNMRVQKSCASDGALV *****
TGF4_HUMAN	301	PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVS LPNMRVQKSCASDGALV
DNA33461	361	PRRLQP *****
TGF4_HUMAN	361	PRRLQP

>37 BAC11556 unnamed protein product /pid=BAC11556.1 - Homo sapiens (366 aa) [1 seg]
 Score = 1838 (712 bits), Expect = 0.0
 Identities = 349/366 (95%), Positives = 354/366 (96%), at 1,1-366,366

DNA33461	1	MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ * *****
BAC11556	1	MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ
DNA33461	61	YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL ** ** *****
BAC11556	61	YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461	121	FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV *****
BAC11556	121	FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461	181	TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL ** *****
BAC11556	181	TEPVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461	241	DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP ** *****

BAC11556 241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV

BAC11556 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV

DNA33461 361 PRRLQP

BAC11556 361 PRRLQP

>38 P_AAU79521 Human endometrial bleeding associated factor (ebaf) mutant R132G
 - Homo sapiens. Synthetic. (366 aa) [1 seg]
 Score = 1836 (711 bits), Expect = 0.0
 Identities = 349/366 (95%), Positives = 354/366 (96%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
 * *****

P_AAU79521 1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
 ** ** *****

P_AAU79521 61 YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

P_AAU79521 121 FQEPVPKAALHGHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

P_AAU79521 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
 ** *****

P_AAU79521 241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV

P_AAU79521 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGTRTPQVVSLPNMRVQKCSCASDGALV

DNA33461 361 PRRLQP

P_AAU79521 361 PRRLQP

>39 P_AAU79520 Human endometrial bleeding associated factor (ebaf) mutant
 R74G/R77G - Homo sapiens. Synthetic. (366 aa) [1 seg]
 Score = 1829 (709 bits), Expect = 0.0
 Identities = 348/366 (95%), Positives = 353/366 (96%), at 1,1-366,366

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
 * *****

P_AAU79520 1 MWPLWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ

DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
 ** ** *****

P_AAU79520 61 YVLLRRSHGDRSGGKGFSSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

```

*****
P_AAU79520 121 FQEPVPKAALHRHGRLSPRSAQARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAU79520 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
** *****
P_AAU79520 241 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP
DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_AAU79520 301 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
DNA33461 361 PRRLQP
*****
P_AAU79520 361 PRRLQP

```

>40 P_AAU77104 Human transforming growth factor beta 4 (TFG-beta-4) polypeptide
- Homo sapiens. (370 aa) [1 seg]
Score = 1755 (680 bits), Expect = 0.0.
Identities = 337/365 (92%), Positives = 346/365 (94%), Gaps = 2/365 (0%), at
1,1-365,363

```

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
* *****
P_AAU77104 1 MWPLWLCWALWVLPLAGPGAALTEEQLLASLLRQLQLSEVPVLD RADMEKLVIPAHVRAQ
DNA33461 61 YVALLQRSHGDRSRGKRFSQSFRVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
** *
P_AAU77104 61 YVLLLRD-GDRSRGKRFSQSFRVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAU77104 120 FQEPVPQALHRHGRLSPAAPKARVTVEWL-VRDDGSNRTSLIDSRLVSVHESGWKAFDV
DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAU77104 179 TEAVNFWQQLSRPPEPLLVQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
** *****
P_AAU77104 239 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP
DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_AAU77104 299 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
DNA33461 361 PRRLQ
*****
P_AAU77104 359 PRRLQ

```

>41 P_AAY92013 Human transforming growth factor beta 4/ebaf monomer - Homo (370
aa) [1 seg]
Score = 1755 (680 bits), Expect = 0.0

Identities = 337/365 (92%), Positives = 346/365 (94%), Gaps = 2/365 (0%), at 1,1-365,363

```
DNA33461      1  MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*  *****
P_AAY92013    1  MWPLWLCWALWVLPLAGPGAALTEEQLLASLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ

DNA33461     61  YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
**  *  *  *****
P_AAY92013    61  YVLLRRD-GDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121  FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
P_AAY92013    120 FQEPVPQALHRHGRLSPAAPKARVTVEWL-VRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181  TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
P_AAY92013    179 TEAVNFWQQLSRPPEPLLVQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241  DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
**  *****
P_AAY92013    239 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCQQP

DNA33461    301  PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV
*****
P_AAY92013    299 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALV

DNA33461    361  PRRLQ
*****
P_AAY92013    359 PRRLQ
```

>42 AAB53269 endometrial bleeding associated factor /pid=AAB53269.1 - Homo (370 aa) [1 seg]

Score = 1755 (680 bits), Expect = 0.0

Identities = 337/365 (92%), Positives = 346/365 (94%), Gaps = 2/365 (0%), at 1,1-365,363

```
DNA33461      1  MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
*  *****
AAB53269      1  MWPLWLCWALWVLPLAGPGAALTEEQLLASLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ

DNA33461     61  YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
**  *  *  *****
AAB53269     61  YVLLRRD-GDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL

DNA33461    121  FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
*****
AAB53269    120 FQEPVPQALHRHGRLSPAAPKARVTVEWL-VRDDGSNRTSLIDSRLVSVHESGWKAFDV

DNA33461    181  TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
*****
AAB53269    179 TEAVNFWQQLSRPPEPLLVQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461    241  DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
**  *****
AAB53269    239 DLRDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCQQP
```

DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASD GALV

 AAB53269 299 PEALAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASD GALV
 DNA33461 361 PRRLQ

 AAB53269 359 PRRLQ

>43 P_AAU91323 Human novel secreted protein LP105 - Homo sapiens. (376 aa) [1 seg]

Score = 1673 (649 bits), Expect = 0.0

Identities = 320/348 (91%), Positives = 328/348 (94%), at 1,1-348,348

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
 * * *****
 P_AAU91323 1 MWPPWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ
 DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
 ** ** *****
 P_AAU91323 61 YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
 DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

 P_AAU91323 121 FQEPVPKAALHRHGRLSPRSAQARVAVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
 DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

 P_AAU91323 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL
 DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
 ** *****
 P_AAU91323 241 DLRDYGAQGDCDPEAPVTEGTCCCHQEMYTDLQGMKWAKNWMPEPLGFLAYKCVGTCQQP
 DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRV

 P_AAU91323 301 LEALAFNWPFLGPRHRCIASETASLPMIVSIKEGGRTRPQVVSLPNMRV

>44 CAD29027 unnamed protein product /pid=CAD29027.1 - Homo sapiens (376 aa) [1 seg]

Score = 1673 (649 bits), Expect = 0.0

Identities = 320/348 (91%), Positives = 328/348 (94%), at 1,1-348,348

DNA33461 1 MQPLWLCWALWVLPLASPGAALTGEQLLGSLLRQLQLKEVPTLDRADMEELVIPTHVRAQ
 * * *****
 CAD29027 1 MWPPWLCWALWVLPLAGPGAALTEEQLLGSLLRQLQLSEVPVLDRADMEKLVI PAHVRAQ
 DNA33461 61 YVALLQRSHGDRSRGKRFSQSFREVAGRFLALEASTHLLVFGMEQRLPPNSELVQAVLRL
 ** ** *****
 CAD29027 61 YVLLRRSHGDRSRGKRFSQSFREVAGRFLASEASTHLLVFGMEQRLPPNSELVQAVLRL
 DNA33461 121 FQEPVPKAALHRHGRLSPRSARARVTVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV

 CAD29027 121 FQEPVPKAALHRHGRLSPRSAQARVAVEWLRVRDDGSNRTSLIDSRLVSVHESGWKAFDV
 DNA33461 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

 CAD29027 181 TEAVNFWQQLSRPRQPLLLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTL

DNA33461 241 DLGDYGAQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQP
 ** ***** ** ** ** **
 CAD29027 241 DLRDYGAQGDCDPEAPVTEGTCCCHQEMYTDLQGMKWAKNWMPEPLGFLAYKCVGTCQQP
 DNA33461 301 PEALAFKWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRV

 CAD29027 301 LEALAFNWPFLGPRHCIASLPMIVSIKEGGRTRPQVVSLPNMRV

>45 P_ABP41932 Human ovarian antigen HUKEJ46, SEQ ID NO:3064 - Homo sapiens.
 (308 aa) [1 seg]

Score = 1204 (468 bits), Expect = e-130

Identities = 224/229 (97%), Positives = 225/229 (98%), at 138,80-366,308

DNA33461 138 PRSARARVTVEWLRVRDDGSNRTSLIDSLVSVHESGWKAFDVTEAVNFWQQLSRPRQPL
 ** ***** ** ** **
 P_ABP41932 80 PRAARARVXVEWLRVRDDGXRTSXIDSRLVSVHESGWKAFDVTEAVNFWQQLSRPRQPL
 DNA33461 198 LLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTLDLGDYGAQGDCDPEAPM

 P_ABP41932 140 LLQVSVQREHLGPLASGAHKLVRFASQGAPAGLGEPQLELHTLDLGDYGAQGDCDPEAPM
 DNA33461 258 TEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAFKWPFLGPRQCI

 P_ABP41932 200 TEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAFKWPFLGPRQCI
 DNA33461 318 ASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALVPRRLQP

 P_ABP41932 260 ASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKSCASDGALVPRRLQP

Dayhoff Protein Database (Rel 77, Jul 2003)

P_ABU54366 Human secreted/transmembrane protein PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_ABU54366;

Species: Homo sapiens.

Keywords: Human; PRO; secreted protein; transmembrane protein;
enterocolitis; gastrointestinal ulceration; skin disease; abnormal
keratinocyte differentiation; psoriasis; epithelial cancer;
squamous cell carcinoma; Alzheimer's disease; Parkinson's disease;
amyotrophic lateral sclerosis; inflammatory disease; rheumatoid
arthritis; asthma; multiple sclerosis; organ failure;
atherosclerosis; cardiac injury; infertility; birth defect;
premature aging; AIDS; acquired immunodeficiency syndrome; cancer;
diabetic complication; wound repair; patent; GENESEQ patentdb.

Patent number: US2002132240-A1.

Publication date: 19-SEP-2002.

Filing date: 18-JUL-2001; 2001US-0909320.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330. 24-OCT-1997; 97US-062814P. 24-OCT-1997;

97US-062816P. plus 27 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather
JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood
WI;

Cross reference: WPI; 2003-147434/14. N-PSDB; ABX71541.

Title: New PRO polypeptides and nucleic acid molecules, useful in
diagnosing or treating inflammatory diseases, organ failure,
atherosclerosis, cardiac injury, infertility, cancer, AIDS,
Alzheimer's disease or Parkinson's disease -

Patent format: Claim 12; Fig 42; 473pp; English.

Comment: The invention relates to an isolated PRO polypeptide having at
least 80% amino acid sequence identity to: (a) any one of 61 fully
defined amino acid sequences given in the specification (appearing
as ABU54347- ABU54407); (b) an amino acid sequence encoded by the
nucleotide sequence deposited under American Type Culture
Collection (accession numbers listed in the specification); (c) any
one of the PRO sequences which lacks its associated signal peptide;
(d) an extracellular domain of the PRO polypeptide with its
associated signal peptide; or (e) an extracellular domain of the
PRO polypeptide which lacks its associated signal peptide. Also
include are the nucleic acids encoding the PRO polypeptides,
vectors, host cells and anti-PRO antibodies. The PRO polypeptides
and nucleic acids are useful in diagnosing or treating
enterocolitis, gastrointestinal ulceration, skin diseases
associated with abnormal keratinocyte differentiation, e.g.
psoriasis or epithelial cancers such as squamous cell carcinoma,
Alzheimer's disease, Parkinson's disease, amyotrophic lateral
sclerosis, inflammatory diseases, e.g. rheumatoid arthritis, asthma
or multiple sclerosis, organ failure, atherosclerosis, cardiac
injury, infertility, birth defects, premature aging, AIDS, cancer,
diabetic complications, or mutations in general. The polypeptides
are also useful for wound repair and associated therapies concerned
with re-growth of tissue. The nucleotide sequences may be used as
hybridisation probes in chromosome and gene mapping, or in

generating antisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in assays to identify other proteins or molecules involved in binding reaction, to generate transgenic animals or knockout animals, which in turn are useful in the development and screening of therapeutically useful reagents, for chromosome identification, and tissue typing. The PRO polypeptides and nucleic acid molecules are also useful in gene therapy, and as molecular weight markers for protein electrophoresis purposes. The anti-PRO antibodies may be used in diagnostic assays for PRO, or for the affinity purification of PRO from recombinant cell culture or natural sources. The present sequence represents a PRO polypeptide.

Database: GENESEQ patent database.

P_ABU64518 Human secreted/transmembrane protein, #22 - Homo sapiens.

Length: 366 aa

Accession: P_ABU64518;

Species: Homo sapiens.

Keywords: Human; PRO; secreted; transmembrane; pharmaceutical; diagnostic; biosensor; bioreactor; therapeutic; hyperplasia; endometriosis; cancer; tumour; ischaemia; coronary arterial disease; polycystic kidney disease; renal failure; inflammatory response; asthma; rheumatoid arthritis; psoriasis; multiple sclerosis; gene therapy; cytostatic; gynecological; cardiac; nephrotropic; hepatotropic; antiinflammatory; patent; GENESEQ patentdb.

Patent number: US2002160374-A1.

Publication date: 31-OCT-2002.

Filing date: 12-JUL-2001; 2001US-0905291.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.24-NOV-1997; 97US-066772P. 18-SEP-2000; 2000US-0665350. plus 76 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-288105/28. N-PSDB; ABX96110.

Title: New secreted and transmembrane PRO polypeptides (e.g. PRO533 or PRO245) and genes encoding them, useful for detecting or treating e.g. hyperplasia, endometriosis, cancers, ischemia, coronary arterial disease or inflammations -

Patent format: Claim 12; Fig 42; 477pp; English.

Comment: The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. The PRO polypeptides or polynucleotides are also useful as pharmaceuticals, diagnostics, biosensors or bioreactors, for detecting or treating e.g. hyperplasia, endometriosis, cancers (e.g. those involving solid tumours), ischaemia, coronary arterial disease, polycystic kidney disease, chronic or acute renal failure, or inflammatory responses (e.g. asthma, rheumatoid arthritis, psoriasis or multiple sclerosis) in mammals. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequences presented in ABU64499-ABU64559 are the PRO

polynucleotides of the invention.

Database: GENESEQ patent database.

P_ABU67364 Human secreted protein PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_ABU67364;

Species: Homo sapiens.

Keywords: Human; gene therapy; mucosal lesion; ulcer; enterocolitis; skin disease; psoriasis; cancer; lung cancer; colon cancer; nerve cell disease; Alzheimer's disease; Parkinson's disease; Usher syndrome; angiogenesis; atrophica areata; inflammatory disease; asthma; rheumatoid arthritis; ischaemia; patent; GENESEQ patentdb.

Patent number: US2003023054-A1.

Publication date: 30-JAN-2003.

Filing date: 16-JUL-2001; 2001US-0906742.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.28-JUL-1999; 99US-146222P. 18-SEP-2000; 2000US-0665350. plus 88 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-331485/31. N-PSDB; ACA05431.

Title: Sixty one isolated nucleic acids encoding a PRO polypeptide, e.g. PRO245 or PRO1868, useful in chromosome and gene mapping, in generating antisense RNA and DNA, and in treating cancer and Alzheimer's disease -

Patent format: Example 18; Fig 42; 481pp; English.

Comment: The invention relates to sixty one nucleic acids encoding PRO polypeptides (secreted and transmembrane). The polynucleotide is useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy. The polynucleotide may also be used in preparing PRO polypeptides by recombinant techniques, and in generating either transgenic animals or knock-out animals which, in turn, are useful in the development and screening of therapeutically useful reagents. The PRO polypeptide or the antibody is used in preparing a medicament for treating a condition responsive to the polypeptide or antibody, such as mucosal lesions e.g. ulcers and enterocolitis, skin disease e.g. psoriasis, cancer e.g. lung cancer and colon cancer, nerve cell disease e.g. Alzheimer's disease and Parkinson's disease, Usher syndrome, atrophica areata, angiogenesis, inflammatory disease e.g. asthma and rheumatoid arthritis, ischaemia, and in various diagnostic assays. The present sequence represents the amino acid sequence of a PRO polypeptide.

Database: GENESEQ patent database.

P_ABU71910 Human secreted/transmembrane protein PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_ABU71910;

Species: Homo sapiens.

Keywords: Human; secreted protein; transmembrane protein; PRO; gene therapy; chromosome identification; chromosome marker; patent; GENESEQ patentdb.

Patent number: US2003003530-A1.

Publication date: 02-JAN-2003.

Filing date: 11-JUL-2001; 2001US-0904011.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.24-NOV-1997; 97US-066772P. 18-SEP-2000;

2000US-0665350. plus 76 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather
JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood
WI;

Cross reference: WPI; 2003-329602/31. N-PSDB; ACA60093.

Title: New transmembrane polypeptides and nucleic acids encoding the
polypeptides, useful in gene therapy, in chromosome identification,
as chromosome markers, in generating probes and in tissue typing -

Patent format: Claim 12; Fig 42; 484pp; English.

Comment: The invention relates to an isolated nucleic acid with at least
80% nucleic acid sequence identity to a nucleotide sequence
encoding one of 61 secreted/transmembrane polypeptides, or PRO
polypeptides or encoding a PRO protein extracellular domain. Also
included are a vector comprising the PRO nucleic acid, a host cell
comprising the vector, producing a PRO polypeptide (by culturing
the host cell for the expression of the PRO polypeptide, and
recovering the PRO polypeptide from the cell culture), an isolated
PRO polypeptide (having at least 80% sequence identity to: (a) an
amino acid sequence selected from the 61 PRO proteins; (b) an amino
acid sequence encoded by a nucleic acid molecule deposited with an
ATCC number (detailed in the specification); or (c) an
extracellular domain of a PRO polypeptide or to a PRO polypeptide
lacking its associated signal peptide), a chimaeric molecule
comprising a PRO polypeptide fused to a heterologous amino acid
sequence, an anti-PRO antibody, detecting a PRO245 or PRO1868 in a
sample suspected of containing the polypeptide, linking a bioactive
molecule to a cell expressing a PRO245 or PRO1868 and modulating at
least one biological activity of a cell expressing a PRO245 or
PRO1868. Nucleic acids which encode PRO can be used to generate
either transgenic animals or knock-out animals which may be used in
the development and screening of therapeutically useful reagents.
The nucleic acids may also be used in gene therapy, in chromosome
identification, as chromosome markers, or in generating probes. The
PRO polypeptides are useful as molecular markers for protein
electrophoresis, and the isolated nucleic acids may be used for
recombinantly expressing those markers. The PRO polypeptides and
nucleic acids may also be used in tissue typing. Anti-PRO
antibodies are useful in diagnostic assays for PRO, and in affinity
purification of PRO from recombinant cell culture or natural
sources. The present sequence represents a PRO protein.

Database: GENESEQ patent database.

P_ABU71464 Human PRO polypeptide #20 - Homo sapiens.

Length: 366 aa

Accession: P_ABU71464;

Species: Homo sapiens.

Keywords: Human; secreted and transmembrane protein; PRO polypeptide;
cancer; Alzheimer's disease; ischaemia; cytostatic; nootropic;
vasotropic; neuroprotective; patent; GENESEQ patentdb.

Patent number: US2002192659-A1.

Publication date: 19-DEC-2002.

Filing date: 10-JUL-2001; 2001US-0902853.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.24-OCT-1997; 97US-062814P. 24-OCT-1997;

97US-062816P. plus 28 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather
JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood
WI;

Cross reference: WPI; 2003-361832/34. N-PSDB; ACA58386.

Title: New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO245 or
PRO1868, useful in molecular biology, chromosome and gene mapping,
in generating antisense RNA and DNA, and in gene therapy -

Patent format: Claim 12; Fig 42; 474pp; English.

Comment: The present invention relates to the isolation of novel human
secreted and transmembrane proteins (PRO polypeptides), and the
polynucleotide sequences encoding them. The polynucleotide
sequences are useful in molecular biology, as hybridisation probes,
in chromosome and gene mapping, in generating antisense RNA and
DNA, and in gene therapy. The polynucleotide sequences may also be
used in preparing PRO polypeptides by recombinant techniques, and
in generating either transgenic animals or knock-out animals which,
in turn, are useful in the development and screening of
therapeutically useful reagents. The PRO polypeptides or their
antibodies are useful in preparing a medicament for treating a
condition responsive to the polypeptide or antibody, such as
cancer, Alzheimer's disease or ischaemia, and in various diagnostic
assays. ABU71445-ABU71505 represent human PRO polypeptides of the
invention.

Database: GENESEQ patent database.

P_ABU69641 Novel human secreted and transmembrane protein PRO317 - Homo
sapiens.

Length: 366 aa

Accession: P_ABU69641;

Species: Homo sapiens.

Keywords: Human; secreted and transmembrane protein; gene therapy;
psoriasis; enterocolitis; gastrointestinal ulceration; skin
disease; keratinocyte differentiation; epithelial cancer;
Alzheimer's disease; squamous cell carcinoma; Parkinson's disease;
inflammatory disease; amyotrophic lateral sclerosis; rheumatoid
arthritis; asthma; multiple sclerosis; organ failure;
atherosclerosis; cardiac injury; infertility; birth defect;
premature aging; AIDS; cancer; diabetic complication; wound repair;
tissue re-growth; patent; GENESEQ patentdb.

Patent number: US2003017463-A1.

Publication date: 23-JAN-2003.

Filing date: 11-JUL-2001; 2001US-0903640.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.28-JUL-1999; 99US-146222P. 18-SEP-2000;

2000US-0665350. plus 88 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;

Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-341586/32. N-PSDB; ACA54901.

Title: New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease -

Patent format: Claim 12; Fig 42; 473pp; English.

Comment: The invention describes sixty one nucleic acids encoding PRO polypeptides (secreted and transmembrane). The PRO polypeptides and nucleic acids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g. rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, diabetic complications, or mutations in general. The polypeptides are also useful for wound repair and associated therapies concerned with re-growth of tissue. The PRO polypeptides and nucleic acid molecules are also useful in gene therapy, and as molecular weight markers for protein electrophoresis purposes. The anti-PRO antibodies may be used in diagnostic assays for PRO, or for the affinity purification of PRO from recombinant cell culture or natural sources. This is the amino acid sequence of a novel human PRO polypeptide.

Database: GENESEQ patent database.

P_ABU71609 Human PRO polypeptide #20 - Homo sapiens.

Length: 366 aa

Accession: P_ABU71609;

Species: Homo sapiens.

Keywords: Human; PRO; secreted polypeptide; transmembrane polypeptide; pathological disorder; cardiac insufficiency disorder; protein secretion; pancreas; diabetes; gastrointestinal mucosa; mucosal lesion; psoriasis; skin disease; keratinocyte differentiation; epithelial cancer; tumour; lung squamous cell carcinoma; epidermoid carcinoma; vulva; glioma; cytostatic; cardiant; endocrine; antidiabetic; gastrointestinal; antiulcer; dermatological; vulnerary; patent; GENESEQ patentdb.

Patent number: US2002146709-A1.

Publication date: 10-OCT-2002.

Filing date: 18-JUL-2001; 2001US-0909088.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.24-NOV-1997; 97US-066772P. 18-SEP-2000; 2000US-0665350. plus 76 more dates.

Assignee: (GETH) GENENTECH INC..

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-328338/31. N-PSDB; ACA58989..

Title: Isolated nucleic acid useful for e.g., treating pathological disorders encodes a secreted or transmembrane protein -

Patent format: Claim 12; Fig 42; 473pp; English.

Comment: The invention relates to human PRO polypeptides (secreted or transmembrane polypeptides) and the polynucleotides encoding them. The PRO polypeptides and polynucleotides can be used in treating pathological disorders and tumours, in therapeutic treatment of cardiac insufficiency disorders and in therapeutic treatment of disorders involving protein secretion by the pancreas, including diabetes. They can also be used in treating disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, and skin diseases associated with abnormal keratinocyte differentiation (e.g., psoriasis, epithelial cancers such as lung squamous cell carcinoma, epidermoid carcinoma of the vulva and gliomas). The sequences can be used as molecular markers for protein electrophoresis purposes and can be utilised in protein-protein binding assays, biochemical screening assays, immunoassays and cell-based assays. This sequence represents a human PRO polypeptide of the invention.

Database: GENESEQ patent database.

P_ABO01793 Novel human secreted and transmembrane protein PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_ABO01793;

Species: Homo sapiens.

Keywords: Human; secreted and transmembrane protein; PRO; pharmaceutical; diagnostic; biosensor; bioreactor; Parkinson's disease; Alzheimer's disease; inflammation; nephritis; wound healing; nerve repair; collateral blood vessel formation; cancer; colorectal cancer; haemorrhage; rheumatoid arthritis; diabetes; cirrhosis; fibrosis; restenosis; dermal fibrotic condition; keloid; scarring; ischaemia; stroke; hypertension; heart attack; atherosclerosis; infertility; gene therapy; patent; GENESEQ patentdb.

Patent number: US2002197671-A1.

Publication date: 26-DEC-2002.

Filing date: 17-JUL-2001; 2001US-0907824.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330. 24-NOV-1997; 97US-066772P. 18-SEP-2000; 2000US-0665350. plus 76 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-370793/35. N-PSDB; ACD07493.

Title: New genes and secreted and transmembrane polypeptides (e.g. PRO245 or PRO335), useful for treating or diagnosing e.g. Alzheimer's disease, cancers, hemorrhage, rheumatoid arthritis, diabetes, cirrhosis, ischemia or strokes -

Patent format: Claim 12; Fig 42; 482pp; English.

Comment: The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American Type Culture Collection (e.g. ATCC Deposit No. 209258) ,or a sequence with at least 80% identity to a DNA encoding a PRO polypeptide comprising any of 61 sequences having 164-1119 amino acids fully defined in the specification. The PRO polypeptides or polynucleotides are useful as pharmaceuticals,

diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating e.g. Parkinson's disease, Alzheimer's disease, inflammations, nephritis, wound healing, nerve repair, collateral blood vessel formation, cancers (e.g. colorectal cancer), haemorrhage (or reduce risk for haemorrhage), rheumatoid arthritis, diabetes, cirrhosis of the liver, fibrosis of the lungs, restenosis, dermal fibrotic conditions (e.g. keloids or scarring), ischaemia, strokes, hypertension, heart attacks, atherosclerosis, or infertility in mammals (e.g. humans, dogs, cats, cattle, horses, sheep, pigs, goats, or rabbits) The PRO polypeptides are useful as targets for therapeutic intervention in these diseases, and diagnostic determination of the presence of these diseases. The PRO polypeptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide.

Database: GENESEQ patent database.

P_AB014823 Human secreted / transmembrane polypeptide PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_AB014823;

Species: Homo sapiens.

Keywords: Human; ss; gene therapy; apoptosis; bleeding; tumour; ALS; gynaecological disease; hysterectomy; angiogenesis; skin disease; cancer; coronary ischaemic condition; gastrointestinal mucosa disorder; asthma; mucosal lesion repair; keratinocyte differentiation; psoriasis; Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis; neuropathy; blood coagulation cascade disorder; thrombosis; haemorrhage; neurodegenerative disease; endometrial bleeding; wound healing; tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing; patent; GENESEQ patentdb.

Patent number: US2003027143-A1.

Publication date: 06-FEB-2003.

Filing date: 16-JUL-2001; 2001US-0906838.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330. 28-JUL-1999; 99US-146222P. 18-SEP-2000; 2000US-0665350. plus 88 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-417249/39. N-PSDB; ACD19736.

Title: Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating abnormal bleeding involved in gynecological diseases, skin diseases and neurodegenerative diseases -

Patent format: Claim 12; Fig 42; 467pp; English.

Comment: The invention relates to an isolated secreted and transmembrane PRO polypeptide. The PRO polypeptides are useful for modulating biological activity of a cell, in diagnosing or treating abnormal

bleeding involved in gynaecological diseases e.g. to avoid or lessen the need for hysterectomy, for treating angiogenesis, tumour, coronary ischaemic condition, disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's disease, amyotrophic lateral sclerosis (ALS), neuropathies, disease related to uncontrolled cell growth (e.g. cancer), blood coagulation cascade disorders, neurodegenerative disease, thrombosis, haemorrhage, endometrial bleeding, wound healing, tissue repair, asthma, rheumatoid arthritis, multiple sclerosis. Nucleic acid encoding PRO polypeptides are useful in molecular biology including uses as hybridisation probes and in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals. The PRO polypeptides and their nucleic acids are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The present sequence represents the amino acid sequence of a human secreted and transmembrane PRO polypeptide.

Database: GENESEQ patent database.

P_AB017574 Human PRO polypeptide #20 - Homo sapiens.

Length: 366 aa

Accession: P_AB017574;

Species: Homo sapiens.

Keywords: Human; PRO; secreted polypeptide; transmembrane polypeptide; leukocyte homing; rheumatoid arthritis; psoriasis; multiple sclerosis; mucosal lesion; enterocolitis Zollinger Ellison syndrome; asthma; antiasthmatic; antirheumatic; antiarthritic; neuroprotective; patent; GENESEQ patentdb.

Patent number: US2003064923-A1.

Publication date: 03-APR-2003.

Filing date: 13-JUL-2001; 2001US-0905348.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.28-JUL-1999; 99US-146222P. 18-SEP-2000; 2000US-0665350. plus 88 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-567190/53. N-PSDB; ACD23584.

Title: Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers -

Patent format: Claim 12; Fig 42; 471pp; English.

Comment: The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The polypeptides are useful for detecting PRO polypeptides and for linking a bioactive molecule to a cell expressing the polypeptides, where the bioactive molecule is a toxin, radiolabel or an antibody.

The bioactive material causes the death of the cell. The polypeptides or antibodies specific to the polypeptides are useful for modulating at least one biological activity of a cell expressing the polypeptides. The polypeptides are useful for treating disorders associated with leukocyte homing such as asthma, rheumatoid arthritis, psoriasis and multiple sclerosis, repair of acute and chronic mucosal lesions such as enterocolitis and Zollinger Ellison syndrome and for identifying agonists or antagonists of the polypeptides. The polynucleotides are useful as hybridization probes, in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptides and for generating probes for polymerase chain reaction (PCR), Northern analysis, Southern analysis and Western analysis. Sequences ABO17555-ABO17615 represent human PRO polypeptides of the invention.

Database: GENESEQ patent database.

P_ABO17513 Human PRO polypeptide #20 - Homo sapiens.

Length: 366 aa

Accession: P_ABO17513;

Species: Homo sapiens.

Keywords: Human; PRO; Parkinson's disease; Alzheimer's disease; ALS; amyotrophic lateral sclerosis; neuropathy; cancer; viral infection; AIDS; Usher's syndrome; haemorrhage; enterocolitis; Zollinger-Ellison syndrome; gastrointestinal ulceration; congenital microvillus atrophy; psoriasis; skin disease; endometrial bleeding; angiogenesis; ischaemic condition; asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disease; atherosclerosis; infertility; birth defect; premature aging; stroke; diabetic complication; patent; GENESEQ patentdb.

Patent number: US2003064367-A1.

Publication date: 03-APR-2003.

Filing date: 13-JUL-2001; 2001US-0904485.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330. 28-JUL-1999; 99US-146222P. 18-SEP-2000;

2000US-0665350. plus 88 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-567176/53. N-PSDB; ACD23222.

Title: Novel isolated PRO polypeptides e.g. PRO245 and PRO1868, useful for treating e.g. Parkinson's disease, Alzheimer's disease, amyotrophic lateral sclerosis, cancer, neuropathies, diabetes and psoriasis -

Patent format: Claim 12; Fig 42; 477pp; English.

Comment: The invention relates to human PRO polypeptides and the polynucleotides encoding them. The polypeptides and polynucleotides are used for treating diseases related to growth or survival of nerve cells such as Parkinson's disease, Alzheimer's disease, amyotrophic lateral sclerosis (ALS) and neuropathies, diseases related to uncontrolled cell growth such as cancer, viral infections, Usher's syndrome, haemorrhage, enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration, congenital microvillus atrophy, skin diseases such as psoriasis and epithelial cancers, endometrial bleeding, angiogenesis, ischaemic conditions,

asthma, rheumatoid arthritis, multiple sclerosis, inflammatory diseases, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, stroke and diabetic complications. The polynucleotides are also useful in chromosome and gene mapping. Sequences ABO17494-ABO17554 represent human PRO polypeptides of the invention.

Database: GENESEQ patent database.

P_ABO14884 Human secreted / transmembrane polypeptide PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_ABO14884;

Species: Homo sapiens.

Keywords: Human; gene therapy; tumour; tissue typing; obesity; arthritis; diabetes; hypoinsulinaemia; hyperinsulinaemia; vascular permeability; cardiac insufficiency disorder; immune response; regeneration; cartilage; auditory hair cell; hearing loss; bone disorder; sports injury; patent; GENESEQ patentdb..

Patent number: US2003036060-A1.

Publication date: 20-FEB-2003.

Filing date: 12-JUL-2001; 2001US-0904859.

Priority: 10-SEP-1998; 98WO-US18824. 14-SEP-1998; 98WO-US19177.

16-SEP-1998; 98WO-US19330.28-JUL-1999; 99US-146222P. 18-SEP-2000;

2000US-0665350. plus 88 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;

Cross reference: WPI; 2003-417923/39. N-PSDB; ACD20098.

Title: Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers -

Patent format: Claim 12; Fig 42; 469pp; English.

Comment: The invention relates to an isolated, secreted and transmembrane polypeptide, termed PRO polypeptide. The polypeptide is useful for identifying agonists or antagonists of the polypeptide, for preparing variants of the polypeptide, as molecular weight markers for protein electrophoresis purpose and the nucleic acid is useful for recombinantly expressing those markers. The polypeptide is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. The nucleic acid is useful as hybridisation probes, in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, to construct hybridisation probes for mapping the gene which encodes the PRO and for the genetic analysis of individuals with genetic disorders, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes for polymerase chain reaction (PCR), Northern analysis, Southern analysis and Western analysis. PRO antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural

sources. The polypeptide or its antibody is useful for the preparation of medicament for treating conditions which is responsive to the PRO polypeptide or anti-PRO antibody e.g. tumour. The polypeptide and the nucleic acid is useful for tissue typing. The polypeptide is useful for treating obesity, diabetes or hypo- or hyper-insulinaemia and cardiac insufficiency disorders, for inhibiting tumour growth, enhances vascular permeability and immune response, for inducing regeneration of auditory hair cells and for treating hearing loss in mammals and for treating bone and/or cartilage disorders such as sports injuries and arthritis. The present sequence represents the amino acid sequence of a human secreted and transmembrane PRO polypeptide.

Database: GENESEQ patent database.

P_ABG96362. Human ovarian cancer marker M457 - Homo sapiens.

Length: 366 aa

Accession: P_ABG96362;

Species: Homo sapiens.

Keywords: Human; ovarian cancer; marker; cancer; familial history; brain disorder; central nervous system disorder; bacterial meningitis; viral meningitis; Alzheimer's disease; Parkinson's disease; cerebral oedema; hydrocephalus; brain herniation; inflammation; encephalitis; testicular disorder; nontuberculous granulomatous orchitis; connective tissue disorder; heart disorder; ischaemic heart disease; atherosclerosis; neoplasm; histological type; carcinogenic; ovarian cancer marker; patent; GENESEQ patentdb.

Patent number: WO200271928-A2.

Publication date: 19-SEP-2002.

Filing date: 14-MAR-2002; 2002WO-US07826.

Priority: 14-MAR-2001; 2001US-276025P. 14-MAR-2001; 2001US-276026P.

10-AUG-2001; 2001US-311732P. 19-SEP-2001; 2001US-323580P.

26-SEP-2001; 2001US-324967P. 26-SEP-2001; 2001US-325102P.

26-SEP-2001; 2001US-325149P.

Assignee: (MILL-) MILLENNIUM PHARM INC.

Inventors: Monahan JE, Gannavarapu M, Hoersch S, Kamatkar S, Kovatis SG; Meyers RE, Morrissey MP, Olandt PJ, Sen A, Vieby PO, Mills GB; Bast RC, Lu K, Schmandt RE, Zhao X, Glatt K;

Cross reference: WPI; 2002-723277/78. N-PSDB; ABS76458.

Title: Assessing whether a patient is afflicted with ovarian cancer, useful in assessing the stage or progression of the disease, comprises comparing the expression level of a cancer marker in a sample from a patient and from a non cancer patient -

Patent format: Disclosure; Page 298-299; 481pp; English.

Comment: The present invention relates to a new method for assessing whether a patient is afflicted with ovarian cancer. The method involves comparing the expression level of a marker in a patient sample and the normal level of expression of the marker in a control non-ovarian cancer sample, where the marker is selected from 363 cancer markers described in the specification. The method of the invention is useful in diagnosing or characterising cancer, in detecting the presence of cancer as early as possible, and the recurrence of ovarian cancer. The method may also be of particular use with patients having an enhanced risk of developing ovarian cancer (e.g. patients having a familial history of ovarian cancer). The cancer markers may be used in the management and treatment of e.g. brain and central nervous system disorders (e.g. bacterial and viral meningitis, Alzheimer's disease or Parkinson's disease),

brain disorders (e.g. cerebral oedema, hydrocephalus or brain herniations), inflammations (e.g. bacterial or viral meningitis or encephalitis), testicular disorders (e.g. nontuberculous granulomatous orchitis), connective tissue disorders, or heart disorders (e.g. ischaemic heart disease or atherosclerosis). The compositions and methods may also be used in assessing the histological type of neoplasm associated with ovarian cancer, monitoring the progression of ovarian cancer, determining whether ovarian cancer has metastasized or is likely to metastasize, selecting a composition for inhibiting ovarian cancer, assessing the ovarian carcinogenic potential of a compound, or inhibiting ovarian cancer or at risk of developing ovarian cancer. The present amino acid sequence represents one of the ovarian cancer markers described in the invention.

Database: GENESEQ patent database.

P_AAE28182 Human Lefty protein - Homo sapiens.

Length: 366 aa

Accession: P_AAE28182;

Species: Homo sapiens.

Keywords: Human; Nodal protein; Lefty protein; cell growth; cell differentiation; tumour; intestinal lung disease; cancer; arthritis; immunosuppression; autoimmunity; leukaemia; lymphoma; immunity; inflammatory bowel disease; myelosuppression; cytostatic; immunosuppressive; antiinflammatory; patent; GENESEQ patentdb.

Patent number: US2002086351-A1.

Publication date: 04-JUL-2002.

Filing date: 20-AUG-1998; 98US-0137415.

Priority: 20-AUG-1998; 98US-0137415.

Assignee: (EBNE/) EBNER R. (SOPP/) SOPPET D R. (RUBE/) RUBEN S M.

Inventors: Ebner R, Soppet DR, Ruben SM;

Cross reference: WPI; 2002-673479/72. N-PSDB; AAD45128.

Title: Novel Nodal and Lefty polypeptides useful for diagnosing or treating cell growth and differentiation related disorders in humans, e.g. cancer, autoimmunity, arthritis and immunosuppression -

Patent format: Claim 27; Page 51-52; 68pp; English.

Comment: The present invention relates to novel Nodal and Lefty polypeptides and polynucleotides encoding such proteins. Sequences of the invention are useful for preventing, treating or ameliorating medical conditions. They are useful to diagnose or treat cell growth and differentiation related disorders in mammals, preferably humans such as tumour, intestinal lung disease, cancer and any dis-regulation of growth and differentiation pattern of cell function including autoimmunity, arthritis, leukaemia, lymphoma, immunosuppression, immunity, humoral immunity, inflammatory bowel disease or myelosuppression. The present sequence is human Lefty protein.

1-18/Peptide

/label= Signal-peptide/

19-366/Protein

/note= Human mature Lefty protein/

19-24/Modified-site

/note= Myristylation site/

68-71/Modified-site

/note= Casein kinase II (CK2) phosphorylation site/

74-77/Cleavage-site

/note= TGF-beta consensus cleavage sequence;/

Amidation site/
 76-79/Modified-site
 /note= cAMP- and cGMP- dependent protein kinase/
 (CPK) phosphorylation site/
 81-83/Modified-site
 /note= Protein kinase C (PKC) phosphorylation site/
 81-84/Modified-site
 /note= Casein kinase II (CK2) phosphorylation site/
 132-135/Cleavage-site
 /note= TGF-beta consensus cleavage sequence/
 137-139/Modified-site
 /note= Protein kinase C (PKC) phosphorylation site/
 139-142/Cleavage-site
 /note= TGF-beta consensus cleavage sequence/
 140-142/Modified-site
 /note= Protein kinase C (PKC) phosphorylation site/
 156-161/Modified-site
 /note= Myristylation site/
 158-161/Modified-site
 /note= N-linked glycosylation site/
 157-159/Modified-site
 /note= Protein kinase C (PKC) phosphorylation site/
 161-164/Modified-site
 /note= Casein kinase II (CK2) phosphorylation site/
 169-172/Modified-site
 /note= Casein kinase II (CK2) phosphorylation site/
 225-230/Modified-site
 /note= Myristylation site/
 260-265/Modified-site
 /note= Myristylation site/
 274-279/Modified-site
 /note= Myristylation site/
 282-297/Region
 /note= TGF-beta family signature/
 296-298/Modified-site
 /note= Protein kinase C (PKC) phosphorylation site/
 319-322/Modified-site
 /note= Casein kinase II (CK2) phosphorylation site/
 329-331/Modified-site
 /note= Protein kinase C (PKC) phosphorylation site/
 329-332/Modified-site
 /note= Casein kinase II (CK2) phosphorylation site/
 Database: GENESEQ patent database.

P_AAB80231 Human PRO317 protein - Homo sapiens.

Length: 366 aa

Accession: P_AAB80231;

Species: Homo sapiens.

Keywords: Human; PRO; dermatological; antipsoriatic; cytostatic;
 antiinflammatory; antiparkinsonian nootropic; neuroprotective;
 vulnerary; cardiant; antiangiogenic; vasotropic; antiasthmatic;
 antirheumatic; cancer; antiarthritic; antiinfertility;
 antidiabetic; antiviral; diabetes; ophthalmological; gene therapy;
 skin disease; gastrointestinal disorder; ischaemia; inflammation;
 patent; GENESEQ patentdb.

Patent number: WO200104311-A1.

Publication date: 18-JAN-2001.

Filing date: 22-FEB-2000; 2000WO-US04414.

Priority: 07-JUL-1999; 99US-0143048. 26-JUL-1999; 99US-0145698.

28-JUL-1999; 99US-0146222. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999; 99WO-US21547.
05-OCT-1999; 99WO-US23089. 29-NOV-1999; 99WO-US28214. 30-NOV-1999;
99WO-US28313. 16-DEC-1999; 99WO-US30095. 20-DEC-1999; 99WO-US30911.
20-DEC-1999; 99WO-US30999. 05-JAN-2000; 99WO-US00219.

Assignee: (GETH) GENENTECH INC.

Inventors: Ashkenazi AJ, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ, Kljavin IJ; Mather
JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood
WI;

Cross reference: WPI; 2001-081051/09. N-PSDB; AAF72392.

Title: Sixty one nucleic acids encoding PRO polypeptides which are useful
in the treatment of skin diseases (e.g. psoriasis), cancers (e.g.
lung squamous cell carcinoma) and neurodegenerative diseases (e.g.
Alzheimer's disease) -

Patent format: Claim 1; Fig 42; 393pp; English.

Comment: The present sequence is one of sixty one novel secreted and
transmembrane PRO polypeptides. The PRO polypeptides are useful for
treating skin diseases (e.g. psoriasis), cancers (e.g. lung
squamous cell carcinoma), gastrointestinal disorders (e.g.
enterocolitis), neurodegenerative diseases (e.g. Alzheimer's
disease, Parkinson's disease), wound repair, cardiovascular
disorders (e.g. endometrial bleeding angiogenesis, ischaemias such
as coronary ischaemia, atherosclerosis), inflammatory disorders
(e.g. asthma, rheumatoid arthritis, multiple sclerosis),
infertility, AIDS and diabetes and retinal disorders such as
retinitis pigmentosum. The PRO nucleic acids have applications in
molecular biology, including use as hybridization probes, and in
chromosome and gene mapping.

Database: GENESEQ patent database.

P_AAB68600 PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_AAB68600;

Species: Homo sapiens.

Keywords: Cytostatic; PRO protein; tumour; cancer; patent; GENESEQ
patentdb.

Patent number: WO200105836-A1.

Publication date: 25-JAN-2001.

Filing date: 20-DEC-1999; 99WO-US30999.

Priority: 20-JUL-1999; 99US-0144758. 26-JUL-1999; 99US-0145698.

08-SEP-1999; 99WO-US20594. 13-SEP-1999; 99WO-US20944. 15-SEP-1999;
99WO-US21090. 05-OCT-1999; 99WO-US23089. 29-NOV-1999; 99WO-US28214.
30-NOV-1999; 99WO-US28313. 02-DEC-1999; 99WO-US28564.

Assignee: (GETH) GENENTECH INC.

Inventors: Botstein D, Goddard A, Gurney AL, Hillan KJ, Roy MA, Wood WI;

Cross reference: WPI; 2001-091968/10. N-PSDB; AAF60376.

Title: New antibody that binds to a PRO polypeptide, e.g. PRO187 and
PRO533, useful for diagnosing and treating cancers -

Patent format: Claim 61; Fig 18; 196pp; English.

Comment: The present invention relates to PRO proteins and coding
sequences. The present sequence is one such PRO protein. It was
found that the PRO genes are amplified in the genome of tumour
cells. The gene amplification is expected to be associated with the

overexpression of the gene product and contributes to tumourigenesis. Therefore, antagonists of PRO proteins are useful for the treatment of benign or malignant tumours, leukaemias, lymphoid malignancies and other disorders such as neuronal, glial, astrocytal, hypothalamic, glandular, epithelial, inflammatory and immunologic disorders.

Database: GENESEQ patent database.

P_AAY88575 Human PRO317 amino acid sequence - Homo sapiens.

Length: 366 aa

Accession: P_AAY88575;

Species: Homo sapiens.

Keywords: Antibody; PRO187; PRO533; PRO214; PRO240; PRO211; PRO230; PRO261; PRO246; PRO317; tumour growth inhibitor; cancer; diagnosis; treatment; human; cell growth; proliferation; transforming growth factor; ADEPT; antibody dependent enzyme mediated prodrug therapy; patent; GENESEQ patentdb.

Patent number: WO200015666-A2.

Publication date: 23-MAR-2000.

Filing date: 08-SEP-1999; 99WO-US20594.

Priority: 10-SEP-1998; 98US-0099803. 10-SEP-1998; 98WO-US18824.

Assignee: (GETH) GENENTECH INC.

Inventors: Goddard A, Gurney AL, Hillan KJ, Roy MA, Wood WI, Botstein D;

Cross reference: WPI; 2000-271386/23. N-PSDB; AAA30056.

Title: New isolated antibodies which bind to specific polypeptides used for diagnosis and treatment of neoplastic cell growth and proliferation

Patent format: Example 9; Fig 18; 200pp; English.

Comment: This sequence represents a human PRO317 amino acid sequence.

PRO317 shares sequence homology with members of the transforming growth factor beta superfamily of proteins. The invention relates to isolated antibodies which bind to a polypeptide. The "PRO" polypeptides are encoded by genes which are over expressed in the genome of tumour cells. Vectors and host cells comprising the nucleic acid encoding the antibodies are used in the production of the antibodies. The antibodies and nucleic acids encoding them are used for diagnosing a tumour in a mammal. The antibodies are used for inhibiting the growth of tumour cells and identifying compounds that inhibit a biological or immunological activity of and/or expression of a PRO187, PRO533, PRO214, PRO240, PRO211, PRO230, PRO261, PRO246 or PRO317 polypeptide. The antibody can be used in antibody dependent enzyme mediated prodrug therapy (ADEPT) by conjugating the antibody to a prodrug-activating enzyme which converts a prodrug to an anti-cancer drug. The antibodies can be fluorescently labelled and monitored by light microscopy, flow cytometry or fluorimetry for diagnosis and prognosis of tumours.

Database: GENESEQ patent database.

P_AAY05287 EGF-like homologue EBAF-2 - Homo sapiens.

Length: 366 aa

Accession: P_AAY05287;

Species: Homo sapiens.

Keywords: Antibody; PRO187; PRO533; PRO214; PRO240; PRO211; PRO230; PRO261; PRO246; EBAF-2; inhibitor; tumour growth; cancer; EGF-like homologue; FGF-8 homologue; patent; GENESEQ patentdb.

Patent number: WO9914327-A2.

Publication date: 25-MAR-1999.

Filing date: 10-SEP-1998; 98WO-US18824.

Priority: 25-NOV-1997; 97US-0066840. 17-SEP-1997; 97US-0059114.

17-SEP-1997; 97US-0059117. 18-SEP-1997; 97US-0059263. 15-OCT-1997;
97US-0062125. 17-OCT-1997; 97US-0062285. 17-OCT-1997; 97US-0062287.
24-OCT-1997; 97US-0062816. 29-OCT-1997; 97US-0063704.

Assignee: (GETH) GENENTECH INC.

Inventors: Botstein D, Goddard A, Gurney A, Hillan K, Lawrence DA; Roy M,
Wood WI;

Cross reference: WPI; 1999-229532/19. N-PSDB; AAX28437.

Title: Antibodies against specific proteins overexpressed in tumours

Patent format: Example 1; Fig 30; 130pp; English.

Comment: This sequence represents the EGF-like homologue EBAF-2. The invention relates to antibodies (Ab) that bind to any of the polypeptides (I) designated PRO187; PRO533; PRO214; PRO240; PRO211; PRO230; PRO261; PRO246 or EBAF-2. The Ab, or other agents that inhibit expression and/or activity of (I) are used: (i) to inhibit growth of tumours; and (ii) as diagnostic/prognostic reagents for detection or quantification of (I) in cells or tissues, by standard immunoassays, with overexpression being indicative of cancer. For therapeutic use, the Ab may be conjugated to a toxin, chemotherapeutic agent or radioisotope. Genes expressing (I), many of which are growth factor homologues, are overexpressed in some cases of cancer.

Database: GENESEQ patent database.

P_AAY03850 Human lefty protein - Homo sapiens.

Length: 366 aa

Accession: P_AAY03850;

Species: Homo sapiens.

Keywords: Nodal protein; lefty protein; TGF-beta; sexual development;
human; pituitary; cartilage; osteoarthritis; osteoporosis;
haematopoiesis; periodontal disease; wound healing; tissue repair;
tumour; cancer; interstitial lung disease; autoimmunity; leukaemia;
lymphoma; immunity; immunosuppression; inflammatory bowel disease;
myelosuppression; infectious disease; bone; patent; GENESEQ
patentdb.

Patent number: WO9909198-A1.

Publication date: 25-FEB-1999.

Filing date: 20-AUG-1998; 98WO-US17211.

Priority: 21-AUG-1997; 97US-0056565.

Assignee: (HUMA-) HUMAN GENOME SCI INC.

Inventors: Ebner R, Ruben SM, Soppet DR;

Cross reference: WPI; 1999-190173/16. N-PSDB; AAX31925.

Title: New isolate human Nodal and Lefty polypeptides

Patent format: Claim 1; Fig 1B; 182pp; English.

Comment: The present invention relates to novel human nodal and lefty proteins which are members of the TGF-beta family. The human nodal and lefty proteins may be involved in a developmental process such as the correct formation of various structures or in one or more post-developmental capacities including sexual development, pituitary hormone production, and the creation of bone and cartilage. The Nodal and Lefty polypeptides are useful for enhancing or enriching the growth and/or differentiation of specific cell populations, eg. embryonic cells or stem cells. They can be used to treat such conditions as osteoarthritis, osteoporosis, and other abnormalities of bone, cartilage, muscle, tendon, ligament, and/or other connective tissues and/or organs

such as liver, lung, cardiac, pancreas, and kidney. Compositions containing nodal and lefty proteins may be useful for growth formation, for treating periodontal disease and for modulating haematopoiesis, wound healing and tissue repair. They can also be used for the treatment of tumours, cancers, interstitial lung disease, and any dysregulation of the growth and differentiation patterns of cell function including autoimmunity, arthritis, leukaemia, lymphomas, immunosuppression, immunity, humoral immunity, inflammatory bowel disease, myelosuppression, or infectious diseases. The present sequence represents a human lefty polypeptide. The cDNA encoding the lefty protein is deposited under the ATCC deposit No. 209091.

1-18/Peptide

/note= signal peptide/

19-366/Protein

/note= mature protein/

78-364/Domain

/note= first predicted TGF-beta like domain of lefty/

136-366/Domain

/note= second predicted TGF-beta like domain of lefty/

143-366/Domain

/note= third predicted TGF-beta like domain of lefty/

Database: GENESEQ patent database.

P_AAY13363 Amino acid sequence of protein PRO317 - Homo sapiens.

Length: 366 aa

Accession: P_AAY13363;

Species: Homo sapiens.

Keywords: Secreted protein; transmembrane protein; human; enterocolitis; Zollinger-Ellison syndrome; gastrointestinal ulceration; congenital microvillus atrophy; skin disease; cell growth; abnormal keratinocyte differentiation; psoriasis; epithelial cancer; Parkinson's disease; Alzheimer's disease; ALS; neuropathy; fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic; wound healing; tissue repair; patent; GENESEQ patentdb.

Patent number: WO9914328-A2.

Publication date: 25-MAR-1999.

Filing date: 16-SEP-1998; 98WO-US19330.

Priority: 25-NOV-1997; 97US-0066840. 17-SEP-1997; 97US-0059113.

17-SEP-1997; 97US-0059115. 24-NOV-1997; 97US-0066511. 24-NOV-1997;

97US-0066453. plus 47 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;

Cross reference: WPI; 1999-229533/19. N-PSDB; AAX52234.

Title: New isolated human genes and polypeptides used in, e.g. treatment of gastrointestinal ulceration

Patent format: Claim 12; Fig 42; 320pp; English.

Comment: AAY13344-403 represent secreted and transmembrane human proteins.

The cDNA sequences are obtained from cDNA libraries, prepared from fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina. The encoded polypeptides have specific uses based on their homology to known polypeptides, e.g. PRO211 and PRO217 can be used for disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus atrophy),

skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous cell carcinoma of the vulva and gliomas), potent effects on cell growth and development, diseases related to growth or survival of nerve cells including Parkinson's disease, Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can be used as an anti-thrombotic agent; PRO287 polypeptides and portions may have therapeutic applications in wound healing and tissue repair; PRO317 can be used for treating problems of the kidney, uterus, endometrium, blood vessels, or related tissue, e.g. in the heart of genital tract.

Database: GENESEQ patent database.

AAD48144 TGF-beta type secreted signaling protein LEFTYB /pid=AAD48144.1 - Homo sapiens

Length: 366 aa

Species: Homo sapiens (human)

Kosaki, K., Kosaki, R., Bassi, M.T. and Casey, B., Submitted (01-AUG-1998)
Department of Pathology, Baylor College of Medicine, One Baylor
Plaza S230, Houston, TX 77030, USA Title: Direct Submission

Locus: AF081512

Accession: AF081512

Cross-references: GI:5725636; AAD48144.1; AF081512_1

Database: GBTRANS

AAH27883 left-right determination, factor B /pid=AAH27883.1 - Homo sapiens

Length: 366 aa

Species: Homo sapiens (human)

Strausberg, R., Submitted (08-APR-2002) National Institutes of Health,
Mammalian Gene Collection (MGC), Cancer Genomics Office, National
Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD
20892-2590, USA Title: Direct Submission

Locus: BC027883

Accession: BC027883

Cross-references: GI:20379729; AAH27883.1; BC027883_1

Database: GBTRANS

AAC33967 signaling molecule LEFTY-B /pid=AAC33967.1 - Homo sapiens

Length: 366 aa

Species: Homo sapiens (human)

Kosaki, K., Kosaki, R., Bassi, M.T. and Casey, B., Submitted (03-AUG-1998)
Department of Pathology, Baylor College of Medicine, One Baylor
Plaza S230, Houston, TX 77030, USA Title: Direct Submission

Locus: HSLEFTYB4

Accession: AF081507

Cross-references: GI:3513759; AAC33967.1; HSLEFTYB4_1

Database: GBTRANS

AAQ89232 LEFTB /pid=AAQ89232.1 - Homo sapiens

Length: 366 aa

Species: Homo sapiens (human)

Clark, H.F., Submitted (01-AUG-2003) Department of Bioinformatics, Genentech,
Inc., 1 DNA Way, South San Francisco, CA 94080, USA Title: Direct
Submission

Locus: AY358873
Accession: AY358873
Cross-references: GI:37182864; AAQ89232.1; AY358873_1
Database: GBTRANS

NP_066277 left-right determination, factor B preproprotein
/pid=NP_066277.1 - Homo sapiens

Length: 366 aa

Species: Homo sapiens (human)

Kosaki, K., Bassi, M.T., Kosaki, R., Lewin, M., Belmont, J., Schauer, G. and Casey, B., Am. J. Hum. Genet. 64 (3), 712-721 (1999) Title: Characterization and mutation analysis of human LEFTY A and LEFTY B, homologues of murine genes implicated in left-right axis development

Gene: LEFTB

Locus: NM_020997

Accession: NM_020997

Cross-references: MIM:603037; NP_066277.1; NM_020997_1

Database: GBTRANS

LFTB_HUMAN Left-right determination factor b precursor /pid=AAC33967.1 - homo sapiens

Length: 366 aa

Species: Homo sapiens (Human)

Accession: O75610; EMBL; AF081507; AAC33967.1. EMBL; AF081504; AAC33967.1.

EMBL; AF081505; AAC33967.1. EMBL; AF081506; AAC33967.1. EMBL; AF081512; AAD48144.1. EMBL; BC027883; AAH27883.1. HSSP; P10600; 1TGJ. Genew; HGNC:6552; LEFTB. MIM; 603037; -. GO; GO:0007179; P:TGFbeta receptor signaling pathway; TAS. InterPro; IPR001839; TGFb. InterPro; IPR001111; TGFb_N. Pfam; PF00019; TGF-beta; 1. Pfam; PF00688; TGFb_propeptide; 1. ProDom; PD000357; TGFb; 1. SMART; SM00204; TGFB; 1. PROSITE; PS00250; TGF_BETA_1; 1.

Kosaki K., Bassi M.T., Kosaki R., Lewin M., Belmont J., Schauer G., Casey B., Am. J. Hum. Genet. 64, 712-721, 1999., Medline: 9162193; PubMed=10053005; (ref. 1: sequence from n.a. tissue=teratocarcinoma) Title: "Characterization and mutation analysis of human LEFTY A and LEFTY B, homologues of murine genes implicated in left-right axis development."

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., Mcewan P.J., Mckernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A., Proc. Natl. Acad. Sci. U.S.A. 99, 16899-16903, 2002., Medline: 2388257; PubMed=12477932; (ref. 2: sequence from n.a. tissue=pancreas, and spleen;) Title: "Generation

and initial analysis of more than 15,000 full-length human and mouse cDNA sequences."

Keywords: developmental protein; growth factor; cytokine; glycoprotein; signal; multigene family.

Taxid: tx:9606

Gene name: LEFTB OR LEFTYB.

1-21/Domain: Signal Potential.

22-76/Domain: Propep Or 135 (potential).

77-366/Domain: Left-Right Determination Factor B.

251-264/Disulfide bonds: By Similarity.

263-316/Disulfide bonds: By Similarity.

293-351/Disulfide bonds: By Similarity.

297-353/Disulfide bonds: By Similarity.

158/Site: Carbohyd N-Linked (glcnac...) (potential).

Database: Swissprot (SPROT), Release 40 (Jan 11, 2003)

P_AAY17870 Human bone morphogenic protein BMP-17 - Homo sapiens.

Length: 366 aa

Accession: P_AAY17870;

Species: Homo sapiens.

Keywords: Human; bone morphogenic protein; BMP-17; BMP-18; cartilage; tendon; connective tissue defect; ligament; meniscus; wound healing; growth; differentiation; epidermis; muscle; nerve; cardiac muscle; patent; GENESEQ patentdb.

Patent number: WO9929718-A2.

Publication date: 17-JUN-1999.

Filing date: 17-NOV-1998; 98WO-US24613.

Priority: 10-DEC-1997; 97US-0987904.

Assignee: (GEMY) GENETICS INST INC.

Inventors: Celeste AJ, Murray BL;

Cross reference: WPI; 1999-385570/32. N-PSDB; AAX80213.

Title: New Purified bone morphogenic protein-17 and -18 (BMP-17 and BMP-18) polypeptides, useful for the induction of growth and/or differentiation of undifferentiated embryonic and stem cells

Patent format: Claim 16; Page 35-36; 39pp; English.

Comment: The present sequence is a human bone morphogenic protein designated BMP-17. BMP proteins are useful for the induction of growth and/or differentiation of undifferentiated embryonic and stem cells, and for the treatment of bone, cartilage and other connective tissue defects including tendons, ligaments and meniscus, in wound healing and related tissue repair, and for treatment of disorders and defects to tissues which include epidermis, nerve, muscle, including cardiac muscle, and other tissues and wounds, and organs such as liver, lung, epithelium, brain, spleen, cardiac, pancreas and kidney tissue. DNA encoding BMP proteins can be useful as probes to detect expression of BMP proteins, and the vectors containing DNA encoding BMP proteins are useful for delivery of the BMP proteins to cells of a patient.

1-142/Peptide

/label= pro-peptide/

143-366/Protein

/label= BMP-17/

Database: GENESEQ patent database.

P_AAU79519 Human endometrial bleeding associated factor (ebaf) - Homo sapiens.

Length: 366 aa

Accession: P_AAU79519;

Species: Homo sapiens.

Keywords: Human; endometrial bleeding associated factor; ebaf; lefty-A; transforming growth factor beta; TGF-beta; Smad; transcription factor; chromosome 1q42.1; retinoic acid; oestrogen; progesterone; fibrosis; scar; cirrhosis; Asherman's syndrome; Meigs' syndrome; scleroderma; autoimmune disorder; muscular dystrophy; Hamman Rich Syndrome; cell proliferation; hyperplasia; neoplasia; cancer; tumour; carcinoma; leukemia; lymphoma; melanoma; sarcoma; coagulation; menstrual bleeding; uterine bleeding; coagulopathy; toxemia; pregnancy; glomerular disease; hydronephrosis; hepatomegaly; splenomegaly; lipodystrophy; insulin resistance; hypertriglyceridaemia; hypermetabolic state; patent; GENESEQ patentdb.

Patent number: WO200229105-A1.

Publication date: 11-APR-2002.

Filing date: 03-OCT-2001; 2001WO-US30872.

Priority: 05-OCT-2000; 2000US-0679971.

Assignee: (NSHO-) NORTH SHORE LONG ISLAND JEWISH RES.

Inventors: Tabibzadeh S, Mason JM;

Cross reference: WPI; 2002-352240/38: N-PSDB; ABK48599.

Title: Inhibiting the activity of transforming growth factor (TGF) beta, for treating e.g. fibrosis, comprises contacting tissue expressing TGF beta with ebaf peptide or its analogue -

Patent format: Disclosure; Fig 2; 54pp; English.

Comment: The invention discloses a method of inhibiting the activity of transforming growth factor (TGF)-beta, comprising contacting tissue expressing TGF-beta with an effective amount of endometrial bleeding associated factor (ebaf) peptide, or an ebaf analogue. TGF-beta expression can also be controlled by contacting the tissue expressing TGF-beta with a modulator of ebaf, or an ebaf analogue, expression. These modulators of ebaf expression include retinoic acid, oestrogen and progesterone. TNF-beta is a pleiotropic peptide that controls the proliferation of many cell types and modulates the coagulation process by binding to two receptors and signalling through the Smad family of transcription factors. To inhibit the activity of TGF-beta, ebaf, or an ebaf analogue, competes with TGF-beta for binding to TGF-beta receptor type I. Inhibiting TGF-beta activity is useful for treating a human with a condition, such as fibrosis, which is associated with overactivity of TGF-beta. The fibrosis is a scar (resulting from a burn, radiation, or a chemical or myocardial infarct), a keloid, cirrhosis, Asherman's syndrome, Meigs' syndrome, a muscular dystrophy (such as Duchenne), an autoimmune disorder (such as scleroderma), post-surgical fibrosis, or primary pulmonary fibrosis, (such as Hamman Rich Syndrome or retroperitoneal fibrosis). The condition may also be a defect in cell proliferation such as hyperplasia or neoplasia, including cancer, tumours, carcinomas, leukemias, lymphomas, melanomas and sarcomas, or a coagulation defect such as menstrual bleeding, abnormal uterine bleeding, coagulopathy, or toxemia of pregnancy. Overexpression of TGF-beta has also been shown to result in glomerular disease, hydronephrosis, hepatomegaly, splenomegaly, lipodystrophies, insulin resistance, hypertriglyceridaemia and a hypermetabolic state. The protein sequence presented is human endometrial bleeding associated factor (ebaf) which is located on chromosome 1q42.1.

137-366/Region

/note= Can also exist as a 28kD form/
Database: GENESEQ patent database.

P_AAB19837 Endometrial bleeding associated factor (ebaf) protein - Homo sapiens.

Length: 366 aa

Accession: P_AAB19837;

Species: Homo sapiens.

Keywords: Endometrial bleeding associated factor; ebaf; human; chromosome 1q42.1; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; Huntington's chorea; dementia; amyotrophic lateral sclerosis; Pick's disease; therapy; patent; GENESEQ patentdb.

Patent number: WO200066068-A2.

Publication date: 09-NOV-2000.

Filing date: 28-APR-2000; 2000WO-US11623.

Priority: 29-APR-1999; 99US-0302094.

Assignee: (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.

Inventors: Tabibzadeh S;

Cross reference: WPI; 2001-040876/05. N-PSDB; AAA88913.

Title: Inducing growth and enhancing survival of nervous tissue by contacting with endometrial bleeding associated factor protein -

Patent format: Disclosure; Fig 2; 23pp; English.

Comment: The present sequence is that of human endometrial bleeding associated factor (ebaf). A claimed method for inducing growth and enhancing survival of nervous tissue comprises contacting the tissue with ebaf or a nucleic acid encoding ebaf in vitro or in vivo. The method can be used to treat damaged or degenerated nervous tissue resulting from injury associated with trauma, diabetes, kidney dysfunction, ischaemia or use of therapeutic agents, or to treat a neurodegenerative disease such as Alzheimer's disease, Parkinson's disease, Huntington's chorea, amyotrophic lateral sclerosis, dementia, or Pick's disease (all claimed).

Database: GENESEQ patent database.

P_AAB95157 Human protein sequence SEQ ID NO:17194 - Homo sapiens.

Length: 366 aa

Accession: P_AAB95157;

Species: Homo sapiens.

Keywords: Human; primer; detection; diagnosis; antisense therapy; gene therapy; patent; GENESEQ patentdb.

Patent number: EP1074617-A2.

Publication date: 07-FEB-2001.

Filing date: 28-JUL-2000; 2000EP-0116126.

Priority: 29-JUL-1999; 99JP-0248036. 27-AUG-1999; 99JP-0300253.

11-JAN-2000; 2000JP-0118776. 02-MAY-2000; 2000JP-0183767.

09-JUN-2000; 2000JP-0241899.

Assignee: (HELI-) HELIX RES INST.

Inventors: Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J; Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;

Cross reference: WPI; 2001-318749/34.

Title: Primer sets for synthesizing polynucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs -

Patent format: Claim 8; SEQ ID 17194; 2537pp + CD ROM; English.

Comment: The present invention describes primer sets for synthesising 5602 full-length cDNAs defined in the specification. Where a primer set

comprises: (a) an oligo-dT primer and an oligonucleotide complementary to the complementary strand of a polynucleotide which comprises one of the 5602 nucleotide sequences defined in the specification, where the oligonucleotide comprises at least 15 nucleotides; or (b) a combination of an oligonucleotide comprising a sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end sequence and an oligonucleotide comprising a sequence complementary to a polynucleotide which comprises a 3'-end sequence, where the oligonucleotide comprises at least 15 nucleotides and the combination of the 5'-end sequence/3'-end sequence is selected from those defined in the specification. The primer sets can be used in antisense therapy and in gene therapy. The primers are useful for synthesising polynucleotides, particularly full-length cDNAs. The primers are also useful for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632 represent oligonucleotides, all of which are used in the exemplification of the present invention.

Database: GENESEQ patent database.

P_AAY17871 Human bone morphogenic protein BMP-18 - Homo sapiens.

Length: 366 aa

Accession: P_AAY17871;

Species: Homo sapiens.

Keywords: Human; bone morphogenic protein; BMP-17; BMP-18; cartilage; tendon; connective tissue defect; ligament; meniscus; wound healing; growth; differentiation; epidermis; muscle; nerve; cardiac muscle; patent; GENESEQ patentdb.

Patent number: WO9929718-A2.

Publication date: 17-JUN-1999.

Filing date: 17-NOV-1998; 98WO-US24613.

Priority: 10-DEC-1997; 97US-0987904.

Assignee: (GEMY) GENETICS INST INC.

Inventors: Celeste AJ, Murray BL;

Cross reference: WPI; 1999-385570/32. N-PSDB; AAX80214.

Title: New Purified bone morphogenic protein-17 and -18 (BMP-17 and BMP-18) polypeptides, useful for the induction of growth and/or differentiation of undifferentiated embryonic and stem cells

Patent format: Claim 20; Page 38-39; 39pp; English.

Comment: The present sequence is a human bone morphogenic protein designated BMP-18. BMP proteins are useful for the induction of growth and/or differentiation of undifferentiated embryonic and stem cells, and for the treatment of bone, cartilage and other connective tissue defects including tendons, ligaments and meniscus, in wound healing and related tissue repair, and for treatment of disorders and defects to tissues which include epidermis, nerve, muscle, including cardiac muscle, and other tissues and wounds, and organs such as liver, lung, epithelium, brain, spleen, cardiac, pancreas and kidney tissue. DNA encoding BMP proteins can be useful as probes to detect expression of BMP proteins, and the vectors containing DNA encoding BMP proteins are useful for delivery of the BMP proteins to cells of a patient.

1-135/Peptide

/label= pro-peptide/
136-366/Protein
/label= BMP-18/
Database: GENESEQ patent database.

AAD48145 TGF-beta type secreted signaling protein LEFTYA /pid=AAD48145.1 -
Homo sapiens

Length: 366 aa
Species: Homo sapiens (human)
Kosaki,K., Kosaki,R., Bassi,M.T. and Casey,B., Submitted (01-AUG-1998)
Department of Pathology, Baylor College of Medicine, One Baylor
Plaza S230, Houston, TX 77030, USA Title: Direct Submission

Locus: AF081513
Accession: AF081513
Cross-references: GI:5725638; AAD48145.1; AF081513_1
Database: GBTRANS

AAH35718 Unknown (protein for MGC:46222) /pid=AAH35718.1 - Homo sapiens

Length: 366 aa
Species: Homo sapiens (human)
Strausberg,R., Submitted (31-JUL-2002) National Institutes of Health,
Mammalian Gene Collection (MGC), Cancer Genomics Office, National
Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD
20892-2590, USA Title: Direct Submission

Locus: BC035718
Accession: BC035718
Cross-references: GI:23273474; AAH35718.1; BC035718_1
Database: GBTRANS

AAC32600 signaling molecule LEFTY-A /pid=AAC32600.1 - Homo sapiens

Length: 366 aa
Species: Homo sapiens (human)
Bassi,M.T., Kosaki,K., Kosaki,R. and Casey,B., Submitted (03-AUG-1998)
Department of Pathology, Baylor College of Medicine, One Baylor
Plaza S230, Houston, TX 77030, USA Title: Direct Submission

Locus: HSLEFTYA4
Accession: AF081511
Cross-references: GI:3450867; AAC32600.1; HSLEFTYA4_1
Database: GBTRANS

NP_003231 endometrial bleeding associated factor preproprotein
/pid=NP_003231.2 - Homo sapiens

Length: 366 aa
Species: Homo sapiens (human)
Kothapalli,R., Buyuksal,I., Wu,S.Q., Chegini,N. and Tabibzadeh,S., J. Clin.
Invest. 99 (10), 2342-2350 (1997) Title: Detection of ebaf, a novel
human gene of the transforming growth factor beta superfamily
association of gene expression with endometrial bleeding

Gene: EBAF
Locus: NM_003240
Accession: NM_003240
Cross-references: MIM:601877; NP_003231.2; NM_003240_1
Database: GBTRANS

TGF4_HUMAN Transforming growth factor beta 4 precursor /pid=AAB53269.1 -
homo sapiens

Length: 366 aa

Species: Homo sapiens (Human).

Accession: O00292; O75611; Q8NBQ9; EMBL; U81523; AAB53269.1. EMBL; AF081511; AAC32600.1. EMBL; AF081508; AAC32600.1. EMBL; AF081509; AAC32600.1. EMBL; AF081510; AAC32600.1. EMBL; AF081513; AAD48145.1. EMBL; AK075344; BAC11556.1. EMBL; BC035718; AAH35718.1. HSSP; P10600; 1TGJ. Genew; HGNC:3122; EBAF. MIM; 601877; -. GO; GO:0007275; P:development; TAS. GO; GO:0007309; P:oocyte axis determination; TAS. GO; GO:0007179; P:TGFbeta receptor signaling pathway; TAS. InterPro; IPR001839; TGFb. InterPro; IPR001111; TGFb_N. Pfam; PF00019; TGF-beta; 1. Pfam; PF00688; TGFb_propeptide; 1. ProDom; PD000357; TGFb; 1. SMART; SM00204; TGFB; 1. PROSITE; PS00250; TGF_BETA_1; 1.

Kothapalli R., Buyuksal I., Wu S.-Q., Chegini N., Tabibzadeh S., J. Clin. Invest. 99, 2342-2350, 1997., Medline: 7298127; PubMed=9153275; (ref. 1: sequence from n.a. tissue=placenta) Title: "Detection of ebafe, a novel human gene of the transforming growth factor beta superfamily association of gene expression with endometrial bleeding."

Kothapalli R., Unpublished results, cited by, Kosaki K., Bassi M.T., Kosaki R., Lewin M., Belmont J., Schauer G., Casey B.; Am. J. Hum. Genet. 64, 712-721, 1999., Medline: 9162193; PubMed=10053005; (ref. 2: revisions.) Title: "Characterization and mutation analysis of human LEFTY A and LEFTY B, homologues of murine genes implicated in left-right axis development."

Kosaki K., Bassi M.T., Kosaki R., Lewin M., Belmont J., Schauer G., Casey B., Am. J. Hum. Genet. 64, 712-721, 1999., Medline: 9162193; PubMed=10053005; (ref. 3: sequence from n.a., and variant l-r axis malformations asn-342. tissue=placenta) Title: "HRI human cDNA sequencing project."

Ota T., Nishikawa T., Suzuki Y., Kawai-Hio Y., Hayashi K., Ishii S., Saito K., Yamamoto J., Wakamatsu A., Nagai T., Nakamura Y., Nagahari K., Sugano S., Isogai T., Submitted (mar-2002) to the EMBL/genbank/ddbj databases., Medline: 2388257; PubMed=12477932; (ref. 4: sequence from n.a.) Title: "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences."

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., Mcewan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A., Proc. Natl. Acad. Sci. U.S.A. 99, 16899-16903, 2002. (ref. 5: sequence from n.a. tissue=ovary;)

Keywords: developmental protein; growth factor; cytokine; glycoprotein; signal; multigene family; disease mutation.

Taxid: tx:9606

Gene name: EBAF OR TGFB4 OR LEFTA OR LEFTYA.

1-21/Domain: Signal Potential.
22-76/Domain: Propep Or 135 (potential).
77-366/Domain: Transforming Growth Factor Beta 4.
251-264/Disulfide bonds: By Similarity.
263-316/Disulfide bonds: By Similarity.
293-351/Disulfide bonds: By Similarity.
297-353/Disulfide bonds: By Similarity.
158/Site: Carbohyd N-Linked (glcnac...) (potential).
342/Site: Variant S -> N (in L-R Axis Malformations). /Ftid=var_010385.
183/Site: Conflict A -> P (in Ref. 4).
Database: Swissprot (SPROT), Release 40 (Jan 11, 2003)

BAC11556 unnamed protein product /pid=BAC11556.1 - Homo sapiens
Length: 366 aa
Species: Homo sapiens (human)
Isogai, T. and Yamamoto, J., Submitted (20-MAR-2002) Takao Isogai, Helix
Research Institute, Genomics Laboratory; 1532-3 Yana, Kisarazu,
Chiba 292-0812, Japan (E-mail:genomics@hri.co.jp,
Tel:81-438-52-3975, Fax:81-438-52-3986) Title: Direct Submission
Locus: AK075344
Accession: AK075344
Cross-references: GI:22761368; BAC11556.1; AK075344_1
Database: GBTRANS

P_AAU79521 Human endometrial bleeding associated factor (ebaf) mutant
R132G - Homo sapiens. Synthetic.
Length: 366 aa
Accession: P_AAU79521;
Species: Homo sapiens. Synthetic.
Keywords: Human; endometrial bleeding associated factor; ebaf; lefty-A;
transforming growth factor beta; TGF-beta; Smad; transcription
factor; chromosome 1q42.1; retinoic acid; oestrogen; progesterone;
fibrosis; scar; cirrhosis; Asherman's syndrome; Meigs' syndrome;
scleroderma; autoimmune disorder; muscular dystrophy; Hamman Rich
Syndrome; cell proliferation; hyperplasia; neoplasia; cancer;
tumour; carcinoma; leukemia; lymphoma; melanoma; sarcoma;
coagulation; menstrual bleeding; uterine bleeding; coagulopathy;
toxaemia; pregnancy; glomerular disease; hydronephrosis;
hepatomegaly; splenomegaly; lipodystrophy; insulin resistance;
hypertriglyceridaemia; hypermetabolic state; mutant; mutein;
patent; GENESEQ patentdb.
Patent number: WO200229105-A1.
Publication date: 11-APR-2002.
Filing date: 03-OCT-2001; 2001WO-US30872.
Priority: 05-OCT-2000; 2000US-0679971.
Assignee: (NSHO-) NORTH SHORE LONG ISLAND JEWISH RES.
Inventors: Tabibzadeh S, Mason JM;
Cross reference: WPI; 2002-352240/38.
Title: Inhibiting the activity of transforming growth factor (TGF) beta,
for treating e.g. fibrosis, comprises contacting tissue expressing
TGF beta with ebaf peptide or its analogue -
Patent format: Disclosure; Page -; 54pp; English.
Comment: The invention discloses a method of inhibiting the activity of
transforming growth factor (TGF)-beta, comprising contacting tissue
expressing TGF-beta with an effective amount of endometrial
bleeding associated factor (ebaf) peptide, or an ebaf analogue.
TGF-beta expression can also be controlled by contacting the tissue

expressing TGF-beta with a modulator of ebaf, or an ebaf analogue, expression. These modulators of ebaf expression include retinoic acid, oestrogen and progesterone. TNF-beta is a pleiotropic peptide that controls the proliferation of many cell types and modulates the coagulation process by binding to two receptors and signalling through the Smad family of transcription factors. To inhibit the activity of TGF-beta, ebaf, or an ebaf analogue, competes with TGF-beta for binding to TGF-beta receptor type I. Inhibiting TGF-beta activity is useful for treating a human with a condition, such as fibrosis, which is associated with overactivity of TGF-beta. The fibrosis is a scar (resulting from a burn, radiation, or a chemical or myocardial infarct), a keloid, cirrhosis, Asherman's syndrome, Meigs' syndrome, a muscular dystrophy (such as Duchenne), an autoimmune disorder (such as scleroderma), post-surgical fibrosis, or primary pulmonary fibrosis, (such as Hamman Rich Syndrome or retroperitoneal fibrosis). The condition may also be a defect in cell proliferation such as hyperplasia or neoplasia, including cancer, tumours, carcinomas, leukemias, lymphomas, melanomas and sarcomas, or a coagulation defect such as menstrual bleeding, abnormal uterine bleeding, coagulopathy, or toxemia of pregnancy. Overexpression of TGF-beta has also been shown to result in glomerular disease, hydronephrosis, hepatomegaly, splenomegaly, lipodystrophies, insulin resistance, hypertriglyceridemia and a hypermetabolic state. The protein sequence presented is mutant of human endometrial bleeding associated factor (ebaf) which is located on chromosome 1q42.1. The substitution of Gly for Arg at residue 132 removes a cleavage site that creates a 28 kD version of ebaf. Note: The presented sequence is not shown in the specification but is derived from the human ebaf wild-type sequence disclosed in figure 2.

132/Misc-difference

/note= Wild-type Arg substituted by Gly/

Database: GENESEQ patent database.

P_AAU79520 Human endometrial bleeding associated factor (ebaf) mutant
R74G/R77G - Homo sapiens. Synthetic.

Length: 366 aa

Accession: P_AAU79520;

Species: Homo sapiens. Synthetic.

Keywords: Human; endometrial bleeding associated factor; ebaf; lefty-A; transforming growth factor beta; TGF-beta; Smad; transcription factor; chromosome 1q42.1; retinoic acid; oestrogen; progesterone; fibrosis; scar; cirrhosis; Asherman's syndrome; Meigs' syndrome; scleroderma; autoimmune disorder; muscular dystrophy; Hamman Rich Syndrome; cell proliferation; hyperplasia; neoplasia; cancer; tumour; carcinoma; leukemia; lymphoma; melanoma; sarcoma; coagulation; menstrual bleeding; uterine bleeding; coagulopathy; toxemia; pregnancy; glomerular disease; hydronephrosis; hepatomegaly; splenomegaly; lipodystrophy; insulin resistance; hypertriglyceridaemia; hypermetabolic state; mutant; mutein; patent; GENESEQ patentdb.

Patent number: WO200229105-A1.

Publication date: 11-APR-2002.

Filing date: 03-OCT-2001; 2001WO-US30872.

Priority: 05-OCT-2000; 2000US-0679971.

Assignee: (NSHO-) NORTH SHORE LONG ISLAND JEWISH RES.

Inventors: Tabibzadeh S, Mason JM;

Cross reference: WPI; 2002-352240/38.

Title: Inhibiting the activity of transforming growth factor (TGF) beta, for treating e.g. fibrosis, comprises contacting tissue expressing TGF beta with ebaf peptide or its analogue -

Patent format: Disclosure; Page -; 54pp; English.

Comment: The invention discloses a method of inhibiting the activity of transforming growth factor (TGF)-beta, comprising contacting tissue expressing TGF-beta with an effective amount of endometrial bleeding associated factor (ebaf) peptide, or an ebaf analogue. TGF-beta expression can also be controlled by contacting the tissue expressing TGF-beta with a modulator of ebaf, or an ebaf analogue, expression. These modulators of ebaf expression include retinoic acid, oestrogen and progesterone. TNF-beta is a pleiotropic peptide that controls the proliferation of many cell types and modulates the coagulation process by binding to two receptors and signalling through the Smad family of transcription factors. To inhibit the activity of TGF-beta, ebaf, or an ebaf analogue, competes with TGF-beta for binding to TGF-beta receptor type I. Inhibiting TGF-beta activity is useful for treating a human with a condition, such as fibrosis, which is associated with overactivity of TGF-beta. The fibrosis is a scar (resulting from a burn, radiation, or a chemical or myocardial infarct), a keloid, cirrhosis, Asherman's syndrome, Meigs' syndrome, a muscular dystrophy (such as Duchenne), an autoimmune disorder (such as scleroderma), post-surgical fibrosis, or primary pulmonary fibrosis, (such as Hamman Rich Syndrome or retroperitoneal fibrosis). The condition may also be a defect in cell proliferation such as hyperplasia or neoplasia, including cancer, tumours, carcinomas, leukemias, lymphomas, melanomas and sarcomas, or a coagulation defect such as menstrual bleeding, abnormal uterine bleeding, coagulopathy, or toxemia of pregnancy. Overexpression of TGF-beta has also been shown to result in glomerular disease, hydronephrosis, hepatomegaly, splenomegaly, lipodystrophies, insulin resistance, hypertriglyceridemia and a hypermetabolic state. The protein sequence presented is mutant of human endometrial bleeding associated factor (ebaf) which is located on chromosome 1q42.1. The substitution of Gly for Arg at residues 74 and 77 removes a cleavage site that creates a 34 kD version of ebaf. Note: The presented sequence is not shown in the specification but is derived from the human ebaf wild-type sequence disclosed in figure 2.

74/Misc-difference

/note= Wild-type Arg substituted by Gly/

77/Misc-difference

/note= Wild-type Arg substituted by Gly/

137-366/Region

/note= Can also exist as a 28kD form/

Database: GENESEQ patent database.

P_AAU77104 Human transforming growth factor beta 4 (TFG-beta-4)
polypeptide - Homo sapiens.

Length: 370 aa

Accession: P_AAU77104;

Species: Homo sapiens.

Keywords: Human; transforming growth factor beta; TGF-beta; insulin production; type I diabetes mellitus; pancreatic cell outgrowth; wound healing; pancreatic duct tissue; ischaemia; stroke; nervous system aging; neurological condition; neurodegenerative disease;

inflammation; vasal injury; chemical injury; traumatic injury;
tumour-induced injury; amyotrophic lateral sclerosis;
spinocerebellar degeneration; immunological disease; multiple
sclerosis; TGF-beta-4; patent; GENESEQ patentdb.

Patent number: WO200212336-A2.

Publication date: 14-FEB-2002.

Filing date: 09-FEB-2001; 2001WO-US04192.

Priority: 09-AUG-2000; 2000US-0635368.

Assignee: (CURI-) CURIS INC.

Inventors: Wang M, Pang K;

Cross reference: WPI; 2002-257468/30.

Title: Treating a subject with a disorder resulting from insufficient
insulin production; and inducing outgrowth of pancreatic cells,
involves using a transforming growth factor beta therapeutic -

Patent format: Disclosure; Fig 4; 77pp; English.

Comment: The invention relates to treating a subject with a disorder
resulting from insufficient insulin production, involving
contacting the subject with a transforming growth factor beta
(TGF-beta) therapeutic. TGF-beta polypeptides can be used for
treating a subject with a disorder resulting from insufficient
insulin production, e.g. type I diabetes mellitus, and for inducing
outgrowth of pancreatic cells associated with pancreatic duct
tissue within a subject. A composition comprising a TGF-beta
protein may be useful in wound healing and treatment of
neurological conditions derived from acute, subacute or chronic
injury to the nervous system, including traumatic injury, chemical
injury, vasal injury and deficits (such as ischaemia resulting from
stroke), together with infectious/inflammatory and tumour-induced
injury, aging of the nervous system including Alzheimer's disease,
chronic neurodegenerative diseases including Parkinson's disease,
Huntington's chorea, amyotrophic lateral sclerosis, spinocerebellar
degenerations and chronic immunological diseases of the nervous
system or affecting the nervous system, including multiple
sclerosis. This sequence represents the human TGF-beta-4 protein.

Database: GENESEQ patent database.

P_AAY92013 Human transforming growth factor beta 4/ebaf monomer - Homo
sapiens.

Length: 370 aa

Accession: P_AAY92013;

Species: Homo sapiens.

Keywords: human transforming growth factor beta 4 monomer; ebaf; CKGF;
mutant; cystine knot growth factor; hairpin loop; infertility;
patent; GENESEQ patentdb.

Patent number: WO200017360-A1.

Publication date: 30-MAR-2000.

Filing date: 19-MAR-1999; 99WO-US05908.

Priority: 22-SEP-1998; 98WO-US19772.

Assignee: (UYMA-) UNIV MARYLAND BALTIMORE..

Inventors: Weintraub BD, Szkudlinski MW;

Cross reference: WPI; 2000-283585/24.

Title: New mutant cystine knot growth factor proteins comprising one or
more mutant subunits, useful for treating or preventing diseases
e.g. hypothyroidism and thyroid cancer

Patent format: Claim 238; Page 302; 320pp; English.

Comment: This is the wild type human transforming growth factor beta 4
monomer. Mutants comprise at least one electrostatic charge

altering mutation in a beta hairpin loop, resulting in increased bioactivity. Mutant cystine knot growth factor (CKGF) proteins comprising one or more mutant subunits and having novel properties or improved pharmacological properties, compared to wild type CKGFs, are claimed. The CKGF superfamily comprises at least four families of growth factors: the glycoprotein hormones, the platelet-derived growth factor (PDGF) family, the neurotrophins and the transforming growth factor-beta family; the families are known to be structurally similar (especially comprising the cystine knot topology) and it was shown that mutations at certain positions in the CKGF hairpin loops of family members and other members of the CKGF superfamily could significantly alter the biological activities of the CKGF. Mutant transforming growth factor family proteins or analogues are useful for treatment of ovulatory dysfunction, luteal phase defect, unexplained infertility, time-limited conception and in assisted reproduction.

1-266/Misc-difference

/note= optionally mutated to increase electrostatic/
interaction between beta hairpin structure and/
a receptor/

267-287/Domain

/label= beta_hairpin_loop_1/

/note= mutant optionally comprises one or more/
substitutions in these residues/

288-317/Misc-difference

/note= optionally mutated to increase electrostatic/
interaction between beta hairpin structure and/
a receptor/

318-337/Domain

/label= beta_hairpin_loop_3/

/note= mutant optionally comprises one or more/
substitutions in these residues/

338-370/Misc-difference

/note= optionally mutated to increase electrostatic/
interaction between beta hairpin structure and/
a receptor/

Database: GENESEQ patent database.

AAB53269 endometrial bleeding associated factor /pid=AAB53269.1 - Homo sapiens

Length: 370 aa

Species: Homo sapiens (human)

Tabibzadeh, S. and Kothapalli, R., Submitted (09-DEC-1996) Pathology, Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, FL 33612, USA Title: Direct Submission

Locus: HSU81523

Accession: U81523

Cross-references: GI:2058538; AAB53269.1; HSU81523_1

Database: GBTRANS

P_AAU91323 Human novel secreted protein LP105 - Homo sapiens.

Length: 376 aa

Accession: P_AAU91323;

Species: Homo sapiens.

Keywords: Human; secreted protein; cancer; autoimmune disease; arthritis; osteoporosis; Alzheimer's disease; Parkinson's disease; meningitis; encephalitis; neoplasia; trauma; ischaemia; infarction; mania;

stroke; cardiovascular disease; atherosclerosis; sepsis; anaemia; rheumatoid arthritis; hypothyroidism; allergic response; liver failure; multiple sclerosis; haemorrhage; paranoia; obsessive compulsive disorder; autism; panic disorder; learning disability; feeding disorder; sleep pattern disorder; balance; perception; Th1-dependent insulinitis; adult respiratory distress syndrome; ARDS; patent; GENESEQ patentdb.

Patent number: WO200214358-A2.

Publication date: 21-FEB-2002.

Filing date: 30-JUL-2001; 2001WO-US21124.

Priority: 11-AUG-2000; 2000US-224642P. 19-OCT-2000; 2000US-241779P.

Assignee: (ELIL) LILLY & CO ELI.

Inventors: Edmonds BT, Micanovic R, Ou W, Su EW, Tschang SR, Wang H;

Cross reference: WPI; 2002-304057/34. N-PSDB; ABK62075.

Title: Novel polypeptides and polynucleotides of secreted proteins useful for treating various diseases such as multiple sclerosis, cancer, autoimmune diseases, osteoporosis, Alzheimer's disease and Parkinson's disease -

Patent format: Claim 9; Page 134-136; 235pp; English.

Comment: The invention relates to a novel human secreted polypeptide having sequence 90% identical to the polypeptide sequences of LP105, LP061, LP224, LP240, LP239(a), LP243(a), LP243(b), LP253, LP218), LP251(a), LP252, LP239(b), LP223(a), LP255(a), LP244, LP186, LP251(b), LP255(b), or LP223(b). Also included are the nucleic acids encoding the LP proteins (including complement, fragments encoding mature forms of the polypeptide or variant), a vector comprising the nucleic acid, a host cell comprising the vector, the preparation of the protein, an anti-LP antibody, ant/agonists of LP and anti-LP-encoding mRNA ribozymes. The secreted protein or its agonist is useful in the manufacture of a medicament for treating a mammal suffering from a disease (and in diagnosis), condition or disorder associated with aberrant levels of the secreted protein e.g. cancer, autoimmune diseases, arthritis, osteoporosis, Alzheimer's disease, Parkinson's disease, meningitis, encephalitis, neoplasia, trauma, ischaemia and infarction, mania, stroke, cardiovascular disease, atherosclerosis, rheumatoid arthritis, hypothyroidism, anaemia, sepsis, allergic responses, multiple sclerosis, liver failure, haemorrhages, paranoia, obsessive compulsive disorder, autism, panic disorder, learning disabilities, ALS (amyotrophic lateral sclerosis) psychoses, disorders in feeding, sleep patterns, balance, and perception, Th1-dependent insulinitis, adult respiratory distress syndrome (ARDS). The secreted protein is further useful for identifying compounds that bind to the secreted protein. The present sequence represents a novel secreted protein of the invention.

Database: GENESEQ patent database.

CAD29027 unnamed protein product /pid=CAD29027.1 - Homo sapiens

Length: 376 aa

Species: Homo sapiens (human)

Edmonds, B.T., Micanovic, R., Ou, W., Su, E.W., Tschang, S.H. and Wang, H.,

Patent: WO 0214358-A 1 21-FEB-2002; ELI LILLY AND COMPANY (US)

Title: Novel secreted proteins and their uses

Locus: AX392959

Accession: AX392959

Cross-references: REMTREMBL:CAD29027; CAD29027.1; AX392959_1

Database: GBTRANS

P_ABP41932 Human ovarian antigen HUKJ46, SEQ ID NO:3064 - Homo sapiens.
Length: 308 aa

Accession: P_ABP41932;

Species: Homo sapiens.

Keywords: Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
ovarian cancer; breast cancer; tumour; reproductive system
disorder; infertility; pregnancy disorder; anovulation; polycystic
ovary syndrome; PCOS; ovarian cyst; dysmenorrhoea; endocrine
disorder; infection; inflammatory condition; immune disorder; blood
disorder; cardiovascular disorder; respiratory disorder;
neurological disorder; gastrointestinal disorder; urinary system
disorder; drug screening; gene therapy; chromosome mapping;
forensic analysis; antibody preparation; cytostatic;
immunomodulatory; neuroprotective; antiinflammatory;
gynaecological; reproductive; patent; GENESEQ patentdb.

Patent number: WO200200677-A1.

Publication date: 03-JAN-2002.

Filing date: 07-JUN-2001; 2001WO-US18569.

Priority: 07-JUN-2000; 2000US-209467P.

Assignee: (HUMA-) HUMAN GENOME SCI INC.

Inventors: Birse CE, Rosen CA;

Cross reference: WPI; 2002-147878/19. N-PSDB; ABQ55009.

Title: Isolated nucleic acid molecules encoding novel ovarian polypeptides,
useful in the prevention, treatment and diagnosis of cancer (e.g.
ovarian cancer), immune disorders, cardiovascular disorders and
neurological diseases -

Patent format: Claim 11; SEQ ID No 3064; 2922pp; English.

Comment: The invention relates to 2175 novel human ovarian antigens
(ABP41054- ABP43228) and to cDNAs encoding them
(ABQ54131-ABQ56305), and also encompasses polypeptides 90%
identical and polynucleotides 95% identical to the sequences of the
invention. The invention additionally relates to recombinant
vectors and host cells comprising human ovarian antigen
polynucleotides, antibodies against human ovarian antigens, and the
use of ovarian antigen polynucleotides and polypeptides in
diagnosing, treating, prognosing or preventing various ovary and/or
breast-related disorders. Such conditions include ovarian cancer
and breast cancer, and metastatic tumours of ovarian or breast
origin, reproductive system disorders (e.g., infertility, disorders
of pregnancy, anovulation, polycystic ovary syndrome, ovarian
cysts, and dysmenorrhoea), endocrine disorders, infections (e.g.,
chlamydia, HIV, toxoplasmosis, and toxic shock syndrome),
inflammatory conditions (e.g., mastitis, oophoritis and vaginitis),
immune disorders (e.g., congenital and acquired immunodeficiencies,
autoimmune oophoritis, systemic lupus erythematosus), blood-related
disorders (e.g., anaemia), cardiovascular disorders, respiratory
disorders, neurological disorders, gastrointestinal disorders and
urinary system disorders. Ovarian antigen polypeptides and
polynucleotides may also be used in screening for compounds which
modulate ovarian antigen expression or activity. The
polynucleotides may further be used for gene therapy, chromosome
mapping, in the identification of individuals and in forensic
analysis, and the polypeptides may be used as food additives or to
prepare antibodies useful in disease diagnosis, drug targeting and
phenotyping. The present sequence represents a human ovarian
antigen of the invention. Note: The sequence data for this patent

did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
Database: GENESEQ patent database.